2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY PLANT GORGAS GYPSUM POND

January 31, 2021

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 Gypsum Pond has been prepared in accordance with the United States Environmental Protection Agency's coal combustion residual rule (40 CFR Part 257, Subpart D) 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 Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, this 2020 Semi-Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2020 semi-annual assessment groundwater monitoring activities at the Plant Gorgas Gypsum 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 Gypsum Pond is performed in accordance with the monitoring requirements § 257.90 through § 257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

The CCR unit began the monitoring period in assessment monitoring pursuant to § 257.95 and ADEM Admin. Code r. 335-13-15-.06(6). Statistically significant increases (SSI) of Appendix III constituents over background were identified in the results of the first detection monitoring event and assessment monitoring was initiated in January 2018. Statistically significant levels (SSL) of Appendix IV parameters above groundwater protection standards (GWPS) were identified while in assessment monitoring. Consequently, an assessment of corrective measures (ACM) was initiated on January 13, 2019 and completed on June 12, 2019 according to the requirements of § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order AO 18-096-GW.

The following summarizes results and activities conducted during the first and second semi-annual monitoring events of 2020:

- Submitted the Semi-Annual Progress Report for Groundwater Delineation Activities on March 30, 2020.
- Submitted the revised Groundwater Monitoring Plan on April 15, 2020; responded to ADEM comments and resubmitted the Groundwater Monitoring Plan on August 24, 2020.
- Conducted the installation, development, and sampling of Phase III delineation wells and additional Site piezometers in May through August 2020.
- Submitted the Semi-Annual Remedy Selection and Design Progress Report on June 8, 2020.
- Submitted 2020 Semi-Annual Groundwater Monitoring and Corrective Action Report on July 31, 2020.
- Submitted Semi-Annual Progress and Groundwater Delineation Report on September 30, 2020.

- Continued the evaluation of monitored natural attenuation (MNA) and geochemical manipulation as
 potential groundwater remediation technologies for the Site as described in the Semi-Annual Remedy
 Selection and Design Progress Reports for the Assessment of Corrective Measures submitted in June
 and December 2020.
- Submitted the Semi-Annual Remedy Selection and Design Progress Report on December 12, 2020.
- Pursuant to 40 CFR 257.90(e)(6), Executive Summary Table Monitoring Period Summary, describes the status of groundwater monitoring and corrective action during the monitoring period for this report.

The CCR unit concluded the monitoring period in assessment monitoring, and Alabama Power Company (APC) is evaluating potential groundwater remedies identified in the Assessment of Corrective Measures (ACM) report submitted to ADEM in June 2019. The following monitoring-related activities are planned for the CCR Unit during the first 2021 semi-annual monitoring period:

- Collect additional data to further evaluate remedies selected as feasible for the remediation of lithium as described in the ACM.
- Perform a conceptual-level feasibility study of potentially viable corrective actions (January to June 2021).
 - o Show where the viable corrective actions could be applied on Site maps and on geologic sections.
 - Compare Site-specific corrective actions to the evaluation criteria in the CCR Rule, with emphasis
 on deficiencies that could eliminate a corrective action from further consideration.
 - o Determine how corrective actions could be integrated with pond closure.
 - o Determine data gaps and develop plans to collect additional data as needed.
- Submit the next Semi-Annual Progress Report to ADEM by March 30, 2021.
- Submit the next Semi-Annual Remedy Selection and Design Progress Report by June 12, 2021.
- Conduct the next semi-annual assessment monitoring event in the Spring of 2021 and submit the annual groundwater monitoring and corrective action report summarizing the findings to ADEM by July 31, 2021.

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

	oring Inintiated: January 15, 2018				
Monitoring Period: January 1 - December 31, 2020					
Beginning Status:	Assessment				
Ending Status:	Assessment				
	Statistical Analysis Results *				
	Appendix III SSIs				
Parameter	Wells				
Boron	GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8				
Calcium	GS-GSA-MW-3, GS-GSA-MW-8				
Chloride	GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8				
Fluoride	NA				
рН	MW-1 (upgradient)				
Sulfate	NA				
TDS	NA				
	Appendix IV SSLs				
Parameter	Wells				
Lithium	GS-GSA-MW-3				
* See the attached	ed report for further details regarding statistical exceedances and alternate source	demonstrations.			
	Assessment of Corrective Measures & Groundwater Remedy				
	Assessment of Corrective Measures				
	Date Initiated: January 13, 2019				
	Date Complete: June 12, 2019				
	Public Meeting Date: July 1, 2020				
	Groundwater Remedy				
	Selected During Period: No				
	Selection Date: Not yet selected				
Initiated During Period: No					
Ongoing During Period: No					

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ABBREVIATIONS

ACM Assessment of Corrective Measures
ADEM Alabama Department of Environmental

AL Alabama

APC Alabama Power Company
APCEL APC Environmental Laboratory
ASD Alternate Source Demonstration

ASTM Alabama Power Company Environmental

BGS below ground surface
CCR Coal Combustion Residual
CEC cation exchange capacity
CFR Code of Federal Regulations

COC chain of custody
COI constituents of interest
CSM conceptual site model
DO dissolved oxygen

EPA United States Environmental Protection Agency

ft feet

GW groundwater

GWPS Groundwater Protection Standard(s)

LCL Lower Confidence Limit(s)

m meter

mg/L milligram per liter

MNA monitored natural attenuation

MSL mean sea level

MW- denotes "Monitoring Well"
NCDS National Coal Data System

NELAP National Environmental Laboratory

NTU nephelometric turbidity unit
ORP oxidation reduction potential

pCi/L picocuries per liter
PE Professional Engineer
PG Professional Geologist

PL prediction limits

PQL practical quantitation limit
PVC polymerizing vinyl chloride
QA/QC quality assurance/quality control

RL reporting limit

RPD relative percent difference SEM scanning electron microscopy

SM Standard Method(s)

SSE selective sequential extraction

SSI	statistically significant increase
SSL	statistically significant level

TAL Test America, Inc.
TOC top of casing

TDS total dissolved solids

USGS Unites States Geological Survey

UTLs Upper Tolerance Limits

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D) and the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, this 2020 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2020 semi-annual assessment groundwater monitoring activities at the Plant Gorgas Gypsum Pond (Gypsum 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 Gypsum Pond is performed in accordance with the monitoring requirements § 257.90 through § 257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

2.0 SITE LOCATION AND DESCRIPTION

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

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

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 and Baker Creek to over 500 feet above MSL along a northwest-trending ridge approximately 1,000 feet northwest of the plant and in upland areas on the western part of the property. Generally, the land surface slopes from north to south and towards the Mulberry Fork of the Black Warrior River. **Figure 2**, **Site Topographic Map**, provides the topography of the Site.

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

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. Deeper stratigraphy is marked by carbonates, shales, chert, and sandstones of Mississippian to Cambrian in age (Raymond et al., 1988). Plant Gorgas is directly underlain by rocks belonging to the Pratt

Coal Group (Ward II et al., 1989) of the Upper Pottsville Formation. In general, the Pratt Group consists of mudstone, shale, fine-grained sandstone, and interbedded coal in fining-upward sequences. The Pratt Coal Group generally contains three named coal seams, each separated by 25 to 50 feet of intra-burden. In descending order, they are the Pratt, Nickel Plate, and American coal seams. Locally, Pratt Coal Group strata gently dip (0.5-1.0 degrees) to the south and south-southwest. **Figure 3**, **Site Geologic Map**, illustrates the surface geology at the Site and neighboring areas.

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

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

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

The Pottsville aquifer system is composed primarily of Pennsylvanian-aged sandstones, shales, conglomerates, and coal. Groundwater flow primarily occurs through coal seams or rock fabric discontinuities such as bedding planes and fractures. Groundwater in the Pottsville aquifer system is commonly regarded as confined due to large permeability contrasts within the aquifer (Stricklin, 1989).

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

2.1.3 Pottsville Formation – Rock Chemistry

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

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

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

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

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

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

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

2.1.4 Uppermost Aquifer

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

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

2.1.5 Flow Interpretation

Groundwater flow at the Site is a subdued replica of the natural topography where gravity is the dominant force driving flow. Groundwater flows from higher topographic elevations north of the Site to lower topographic elevations to the south and generally towards the Mulberry Fork of the Black Warrior River. Mine spoil layering and complex Pottsville Formation lithofacies contribute to the vertical and horizontal heterogeneity within the aquifer system and overlying saturated mine spoils. This heterogeneity focuses groundwater flow along more permeable pathways, such as parallel to coal seams and bedding plains, or along vertical or sub-vertical discontinuities in the rock fabric. A potentiometric surface map for the Site is presented in a later section.

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 Gypsum Pond is designed to monitor groundwater passing the waste boundary of the CCR unit within the uppermost aquifer. Wells were located to serve as upgradient or downgradient monitoring locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps. All groundwater monitoring wells were designed and constructed using "Design and Installation of Groundwater Monitoring Wells in Aquifers," ASTM Subcommittee D18.21, as a guideline.

2.2.1 Monitoring Wells

Groundwater bearing zones are not easily found at the site. A total of 30 well or exploratory boring locations were attempted around the perimeter of the Gypsum Pond to depths between 26 and 307 feet BGS. Geophysical, hydrogeophysical, and purging were employed at locations to further assess hydrogeological conditions and identify water-bearing zones. The groundwater monitoring network comprises 7 monitoring wells and 11 piezometers. 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 Plant Gorgas Gypsum Pond.

2.2.1.1 Upgradient Wells

Attempts at installing upgradient well locations west, north, and east of the Gypsum Pond were unsuccessful because water-bearing zones were not encountered. Therefore, four locations upgradient of the nearby Plant Gorgas landfills were selected to provide background groundwater quality data. These locations were selected based on the facts that the wells are proximal to the site, have not been affected by a CCR unit release, and are installed in similar geology. Each of these sites is located within the same coal group sequence of the Pottsville and contains backfilled mine material overburden. Monitoring well locations MW-1, MW-2, MW-3, and MW-4 serve as upgradient locations for the Gypsum Pond.

2.2.1.2 Downgradient Wells

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

2.2.1.3 Delineation Wells

Pursuant to § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-096-GW, additional wells were installed to characterize the horizontal and vertical extent of groundwater protection standard (GWPS) exceedances identified during assessment monitoring. Three phases of field investigation have

occurred since late 2018 to explore potential impacts to groundwater. Field work for Phase III efforts concluded in early July 2020.

Delineation wells are identified on **Figure 5**. All delineation wells are sampled semi-annually as part of the semi-annual assessment groundwater monitoring program. **Table 1 Groundwater Monitoring Well Network Details**, summarizes construction details.

2.2.1.4 Piezometers

Horizontal delineation well GS-GSA-MW-10H was converted from delineation location to piezometer. This well location did not produce sufficient groundwater yield for well development and low-flow sampling methods. Locations GS-GSA-PZ-2A, GS-GSA-MW-1, and GS-GSA-MW-2 recently changed to water-level only piezometers for the purpose of better depicting groundwater flow direction. These locations were installed in 2015 but did not produce sufficient groundwater yield for well development or low-flow sampling methods. Locations GS-GSA-PZ-16 through GS-GSA-PZ-22 were installed in May 2020 to be used as water-level only piezometers, and were sampled in August 2020 as part of the second semi-annual sampling event. Piezometers GS-GSA-PZ-17 though GS-GSA-PZ-22 were installed in the vicinity of a previously unknown strip-mined coal storage area, and further historical use research of the area is ongoing.

Piezometers are presented on **Figure 5** and well construction details are summarized in **Table 1**.

2.2.1.5 Monitoring Variance

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

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

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 Gypsum Pond in August 2017.

2.2.2.1 Available Monitoring Data

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

Based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, APC initiated an assessment monitoring program on January 15, 2018. Pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a), monitoring wells were sampled for all Appendix IV parameters in February 2018, within 90 days of initiating the assessment monitoring program. Semi-annual assessment sampling continues to the present.

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

2.2.2.2 Historical Groundwater Flow

Historical potentiometric data from the site show that groundwater flow generally is a subdued representation of topography. Groundwater flows from higher topographic elevations north and east of the Gypsum Pond to lower topographic elevations to the south. Mine spoil layering and complex Pottsville Formation lithofacies contribute to the vertical and horizontal heterogeneity present within the aquifer system and overlying saturated mine spoils. This heterogeneity focuses groundwater flow along more permeable pathways, such as parallel to coal seams and bedding plains, or along vertical or sub-vertical discontinuities in the rock fabric. Thus, groundwater flow paths across the Site can be tortuous.

Groundwater elevations fluctuate in response to rainfall. Seasonal variations of 2 to 20 feet are typical at the site. These fluctuations are consistent in monitoring wells across the site indicating a response to rainfall events.

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 Gypsum Pond entered an assessment monitoring program pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a) in January 2018. Statistical evaluations of 2018 assessment monitoring data identified SSLs of Appendix IV constituents above the GWPS, and the Site performed an Assessment of Corrective Measures. Pursuant to § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-096-GW, delineation 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 events occurred in February 2020 and August 2020. Phase III delineation wells and select piezometers were sampled for the first time in July 2020. These locations were sampled independently of other compliance and delineation wells (Phase I and Phase II delineation wells) but were added to the routine semi-annual sampling schedule beginning with the second 2020 semi-annual monitoring event.

Groundwater samples, at a minimum, are analyzed for the full list of Appendix III and Appendix IV parameters during each assessment monitoring event. Analytical data is included as **Appendix B**, **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 at Plant Gorgas are equipped with a dedicated pump. Monitoring wells were purged and sampled using low-flow sampling procedures. In this procedure, field water quality parameters (pH, turbidity, conductivity,

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

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

During purging and sampling, 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 B, 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 6 °C immediately after collection. Blue ice or other cooling packs were not used for cooling samples. An ice-packed cooler was on hand when samples were collected.

2.2.3.4 Chain of Custody

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

2.2.3.5 Laboratory Analysis

Laboratory analyses were performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama or Eurofins TestAmerica of Pensacola, Florida and St. Louis, Missouri. Both APCEL and Eurofins TestAmerica 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 COC records for the monitoring events are presented in **Appendix B**.

3.0 GROUNDWATER DATA EVALUATION

3.1 GROUNDWATER ELEVATION DATA EVALUATION

During the February 2020 sampling event, depths to water in the downgradient and delineation wells ranged from 6.73 and 121.02 feet below top of casing (ft BTOC), and groundwater elevations ranged from 372.06 to 256.29 feet above mean sea level (ft MSL). **Figure 6A, Potentiometric Surface Contour Map** (**February 3, 2020**) and **Figure 6B, Potentiometric Surface Contour Map** – **Vertical Delineation Wells** (**February 3, 2020**) depict groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

During the August 2020 sampling event, depths to water in the downgradient and delineation wells ranged from 6.81 and 126.31 ft BTOC, and groundwater elevations ranged from 256.21 to 429.97 ft MSL. Figure 7A, Potentiometric Surface Contour Map – Water Table (August 3, 2020), Figure 7B, Potentiometric Surface Contour Map – Mid Interval (August 3, 2020) and Figure 7C, Potentiometric Surface Contour Map – Deep Interval (August 3, 2020) depict groundwater elevations and inference groundwater flow direction from higher elevation to lower elevations.

As shown on **Figures 6A**, **6B**, **7A**, **7B**, and **7C**, groundwater appears to flow towards the narrow valley occupied by the Gypsum Pond from the north, west, and east of the Site. Groundwater in the valley flows southward towards the Mulberry Fork of the Black Warrior River. All available groundwater elevation data recorded since 2016 have been tabulated and included in **Table 3**, **Groundwater Elevation Summary**.

3.2 HORIZONTAL GROUNDWATER FLOW VELOCITY CALCULATION

Because the geology at the Gypsum Pond is not homogeneous or isotropic with respect to groundwater flow, groundwater velocity calculations using derivations of Darcy's Law, or other methods, will not fully represent the spatial variability across the site. Groundwater flow velocity calculations are provided as a general estimate of groundwater flow velocity at the site based on available information and assumptions described below.

The hydrogeologic characteristics of mine spoils and fractured rock can produce preferential groundwater flow paths, so groundwater velocity is much more variable than in uniform porous media such as sand. These flow paths correspond to more permeable lenses in mine spoil and fractures, zones of fracture concentration, bedding planes, and other discontinuities in the rock. Therefore, groundwater flow velocity at the Site will be highly variable.

Slug testing provided horizontal hydraulic conductivities for the uppermost aquifer between 5.11×10^{-3} centimeters per second (cm/sec) and 2.47×10^{-4} cm/sec. The average hydraulic conductivity value used in the calculations is 2.83×10^{-3} cm/sec or 8.01 ft/day. An estimated effective porosity of 0.15 is used in the flow rate calculations. The hydraulic gradient was calculated and shown on **Table 4**, **Horizontal Groundwater Flow Velocity Calculations**.

An estimate of the horizontal groundwater flow velocity was calculated using the commonly-used derivative of Darcy's Law:

$$V = \frac{K * i}{n_e}$$

Where:

V =Groundwater flow velocity $\left(\frac{feet}{day}\right)$

 $K = \text{Average permeability of the aquifer } \left(\frac{feet}{day}\right)$

i = Horizontal hydraulic gradient

 n_e = Effective porosity

Table 4 presents the estimated horizontal flow velocity calculated using groundwater elevation data from the sampling events in 2020. Darcy's Law provides an approximate horizontal flow velocity because, as stated above, the Site is not homogeneous or isotropic with respect to groundwater flow.

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 blank and field blank samples were also collected during each sampling event.

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

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the relative percent difference is below 20%, the difference is considered acceptable and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 5, Relative Percent Difference Calculations,** provides the relative percent differences for sample and sample duplicates during 2020 sampling events. All RPDs were below 20% for the most recent sampling event. Equipment blanks and field blanks were all non-detect for the most recent sampling event. Therefore, no data validation qualifiers were applied to data received.

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

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

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

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

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

4.2.2 Appendix IV Evaluation

When in assessment monitoring, Appendix IV constituents are sampled semi-annually, and concentrations are compared to the GWPS. Following the Unified Guidance, spatial variation for Appendix III parameters is tested using the ANOVA; this test is not prescribed for Appendix IV constituents. Unlike the statistical evaluation of Appendix III constituents (where single-sample results are compared to the statistical limit),

Appendix IV analysis uses the pooled results from each downgradient well to develop a well-specific Confidence Interval that is compared to the statistical limit. The statistical limit is either the Interwell Tolerance limit (i.e. background) calculated using the pool of all available upgradient well data (see Chapter 7 of the Unified Guidance), or an applicable groundwater protection standard such as the MCL. Appendix IV background data are screened for outliers and extreme trending patterns that would lead to artificially elevated statistical limits.

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

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

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

In assessment monitoring, when the Lower Confidence Limit (LCL), or the entire interval, exceeds the GWPS as discussed in the USEPA Unified Guidance (2009), the result is recorded as an SSL. Appendix IV constituents will be updated every 2 years beginning with the Fall 2019 semi-annual sampling event. The next update to GWPS will occur no earlier than the Fall of 2021. Data from upgradient wells collected between updates may still be used to support ASDs if merited.

4.3 STATISTICAL EXCEEDANCES

Analytical data from the 2020 semi-annual monitoring events in February and August 2020 were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (October 2017) and updated in the August 2020 data screening evaluation performed by Groundwater Stats Consulting. Appendix III statistical analysis was performed to determine if constituents had returned to

background levels. Appendix IV assessment monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

4.3.1 Appendix III Constituents

Based on review of the Appendix III statistical analysis presented in **Appendix C**, **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 C**.

The following subsections describe statistical exceedances during 2020 monitoring events.

4.3.2.1 Semi-Annual Groundwater Monitoring Events

Statistical analysis of Appendix IV data did not identify any Appendix IV SSLs during the first or second semi-annual monitoring events. **Table 7, First Semi-Annual Monitoring Event Analytical Summary**, and **Table 8, Second Semi-Annual Monitoring Event Analytical Summary** provide a summary of all constituents for the first and second semi-annual sampling event.

A review of analytical data derived from delineation wells identified the following GWPS Exceedances for the first and second semi-annual sampling events:

- GS-AP-MW-3V: Lithium.
- GS-GSA-MW-12H: Lithium.
- GS-GSA-MW-13H: Arsenic.
- GS-GSA-MW-14H: Lithium.
- GS-GSA-PZ-17: Lithium.
- GS-GSA-PZ-18: Lithium.
- GS-GSA-PZ-18: Arsenic.
- GS-GSA-PZ-22: Arsenic.

Elevated arsenic was encountered in well GS-GSA-MW-13H during the first and second semi-annual events at concentrations of 0.16 mg/L and 0.103 mg/L, respectively (**Tables 7** and **8**). However, this

elevated concentration and GWPS exceedance is not the result of an impact to groundwater from the Gypsum Pond. Wells immediately downgradient of the Gypsum Pond, as well as wells between the Gypsum Pond and GS-GSA-MW-13H, have historically been non-detect or detected at only trace concentrations. This absence of arsenic in all other wells is notable, because if an arsenic impact were related to the Gypsum Pond, the highest concentrations would be expected closer to the Gypsum Pond and diminish to the south in the direction of groundwater flow away from the facility. The observation described in this report is the opposite of that scenario.

Leachate data obtained from the Gypsum Pond showed that arsenic leached at only low-level concentrations and therefore, the Gypsum Pond is not a source of arsenic, especially at that concentration. Leachate data are included in **Appendix D**, **Leachate Data**. The arsenic concentration observed in this well is most likely the result of an organic clay layer that occupies the uppermost part of the well screen.

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

Piezometers GS-GSA-PZ-16 through GS-GSA-PZ-22 were installed in May 2020 as part of Phase III delineation efforts. These piezometers were added to the routine semi-annual sampling schedule beginning with the second 2020 semi-annual monitoring event. During the second semi-annual monitoring event, lithium was detected in groundwater samples collected from GS-GSA-PZ-17 and GS-GSA-PZ-18 at concentrations of 1.39 and 0.422 mg/L, respectively, exceeding the established GWPS for lithium (0.419 mg/L). Additionally, arsenic was detected in groundwater samples collected from GS-GSA-PZ-18 and GS-GSA-PZ-22 at concentrations of 0.0114 and 0.0297 mg/L, respectively, exceeding the established GWPS for arsenic (0.01 mg/L). However, the elevated concentrations and GWPS exceedance is not the result of an impact to groundwater from the Gypsum Pond. A review of historical aerial photography indicated that the wells were installed in the vicinity of a former strip-mined coal storage area. Analytical results compare with previously referenced publications that document elevated trace metals in Pottsville and Pottsville coal strata as discussed in Section 2.1.3. Further historical use research of the area is ongoing.

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

6.0 EVALUATION OF GROUNDWATER CORRECTIVE MEASURES

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

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

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

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

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

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

• Scanning electron microscopy (SEM) to directly observe attenuating mineral phases.

- Selective sequential extraction (SSE) to determine association of COI with attenuating phases,
 determine relative strength of attenuation, and provide a sense of permanence.
- Cation exchange capacity (CEC) to assess ion exchange as an attenuation mechanism.

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

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

6.1 PRELIMINARY FINDINGS FROM THE GEOCHEMICAL ANALYSES

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

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

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

• Molybdenum attenuation by adsorption to iron oxides.

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

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

7.0 SUMMARY AND CONCLUSIONS

Semi-annual assessment monitoring took place in February and August 2020. Statistical evaluations of the 2020 assessment monitoring data did not identify 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. These additional monitoring wells will continue to be sampled and analyzed as part of the ongoing assessment monitoring program.

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

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

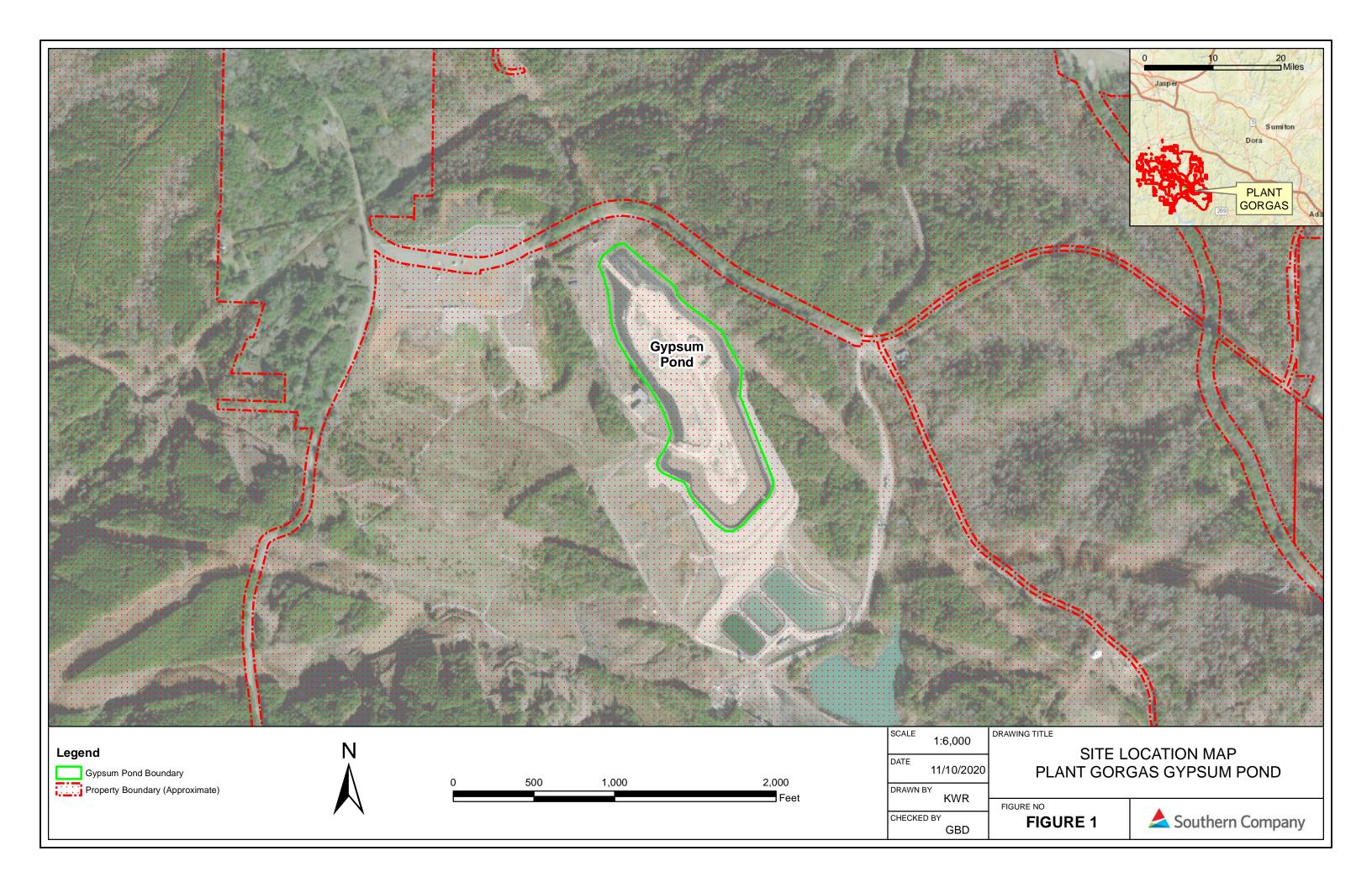
- Collect additional data to further evaluate remedies selected as feasible for the remediation of lithium as described in the ACM.
- Perform a conceptual-level feasibility study of potentially viable corrective actions (January to July 2021).
 - o Show where the viable corrective actions could be applied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

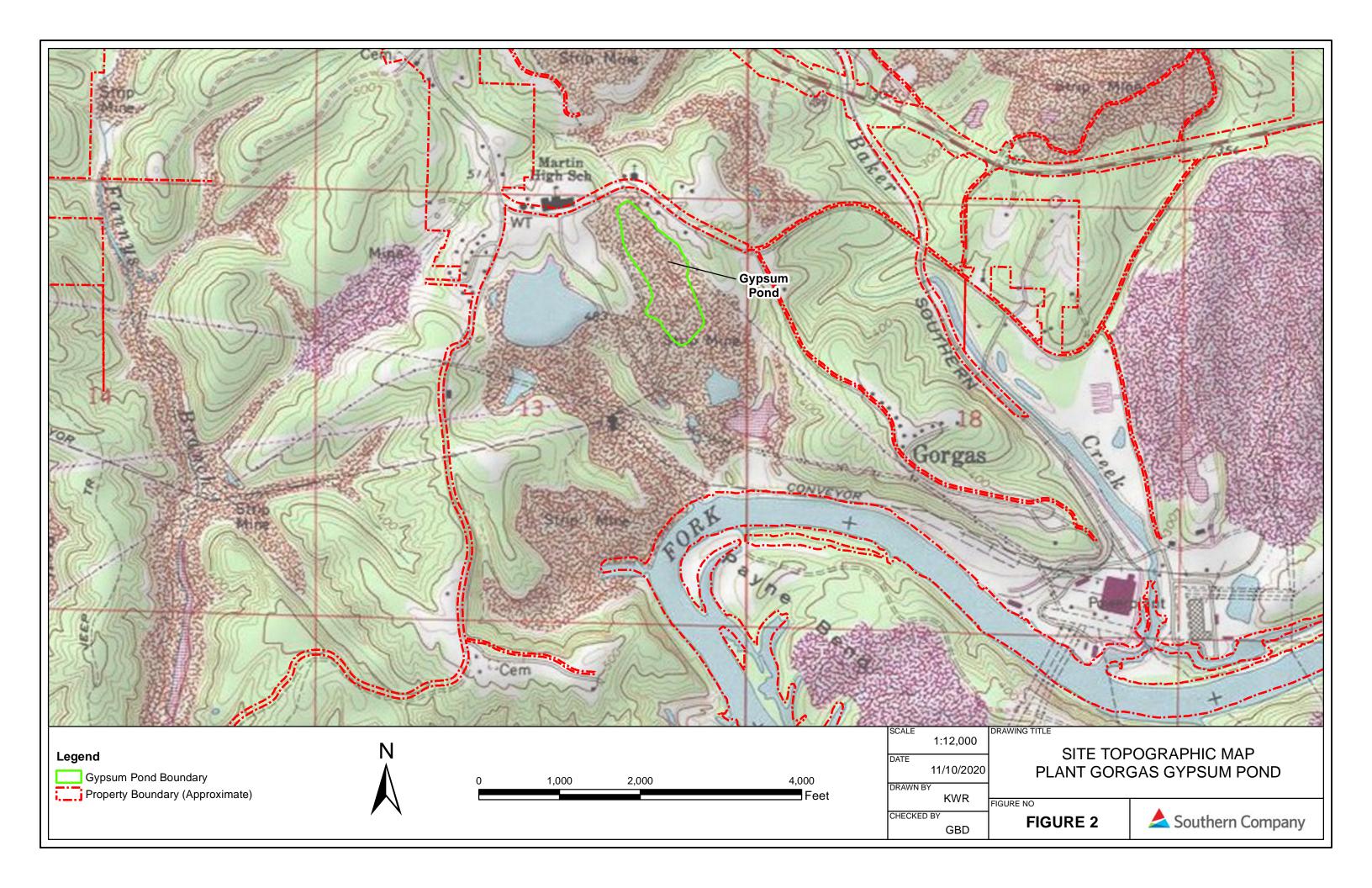
8.0 REFERENCES

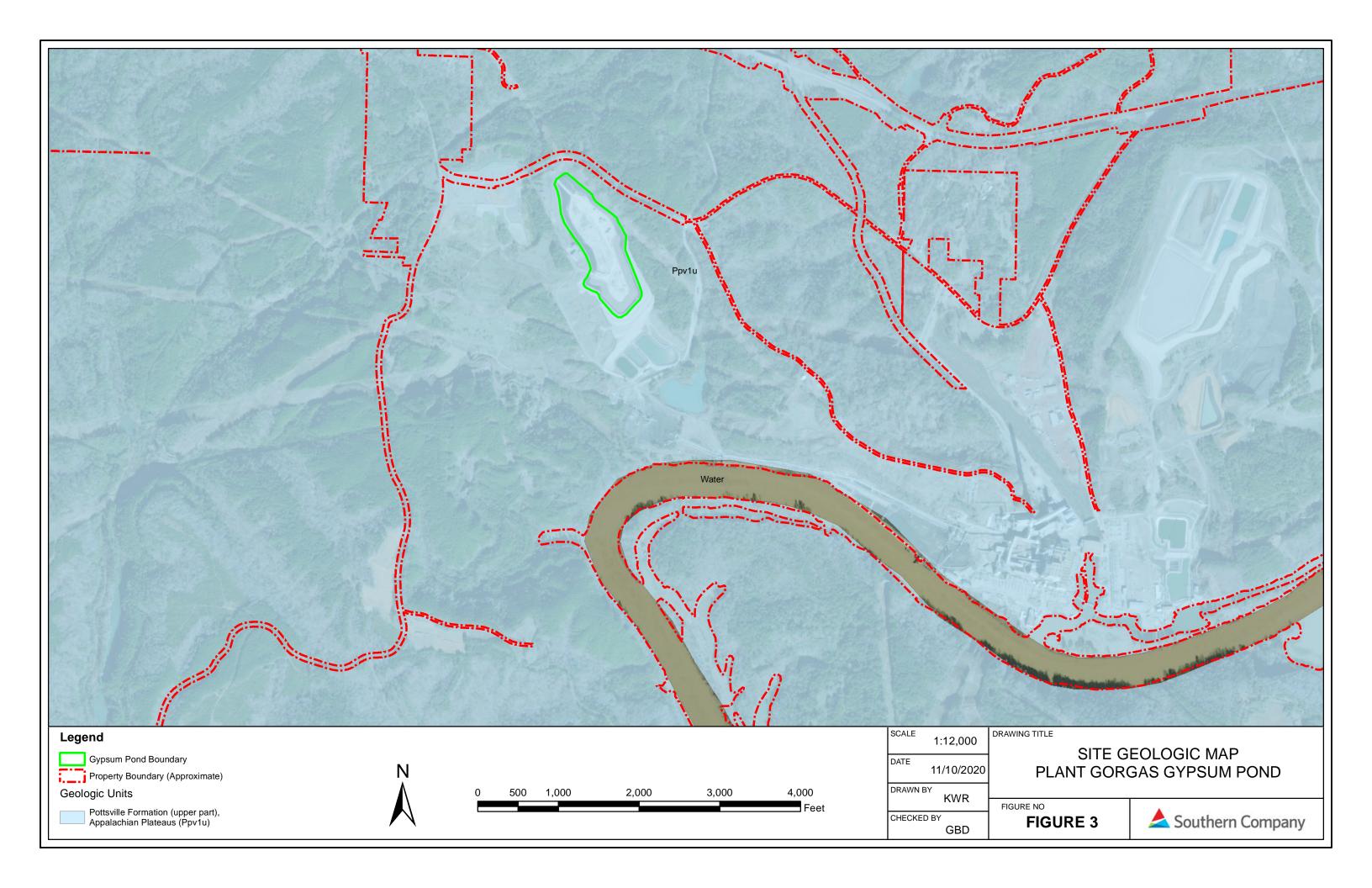
- Alabama Department of Environmental Management (ADEM), 2018, Solid Waste Program, Division 13, ADEM Admin. Code r. 335-13-15.
- Anchor QEA, 2020, Semi-Annual Remedy Selection and Design Progress Report Plant Gorgas.
- ASTM Standard D5092, 2004(2010)e1, Standard Practice for Design and Installation of Groundwater Monitoring Wells, ASTM International, West Conshohocken, PA, DOI 10.1520/D5092-04R10E01, www.astm.org.
- Bragg, L.J., Oman, J.K., Tewalt, S.J., Oman, C.L., Rega, N.H., Washington, P.M., and Finkelman, R.B., 1997, U.S. Geological Survey Coal Quality (COALQUAL) database; version 2.0, U.S.
- Diehl, S.F., Goldhaber, M.B., and Hatch, J.R., 2004, Modes of occurrence of mercury and other traceelements in coals from the warrior field, Black Warrior Basin, Northwestern Alabama, International Journal of Coal Geology, v. 59, p. 193-208.
- Geological Survey of Alabama (GSA), 2010b, Digital Geologic Map of Alabama, URL: http://www.gsa.state.al.us, accessed November, 2010.
- Goldhaber, M.B., Lee, R.C., Hatch, J.R., Pashin, J.C., and Treworgy, J., 2002, The role of large-scale fluid flow in subsurface arsenic enrichment, In: Welch, A., Stollenwerk, K (Eds.), Arsenic in Ground Water: Occurrence and Geochemistry, v. 5, p. 127-176.
- Jennings, S.P., and Cook, M.R., 2010, A Report to the Hanceville Water Works and Sewer Board, Open File Report 1001.
- Kolker, A., and Nordstrom, D.K. 1997, Occurrence and Micro-Distribution of Arsenic in Pyrite, U.S. Geological Survey.
- O'Rear, D.M., Wahl, K.D., and Jefferson, P.O., 1972, Water availability and geology of Walker County, Alabama: Geological Survey of Alabama Map 120, 21p.
- Palmer, C.A., Oman, C.L., Park, A.J., and Luppens, J.A., 2015, The U.S. Geological Survey coal quality (COALQUAL) database version 3.0: U.S. Geological Survey Data Series 975, 43 p.with appendixes, http://dx.doi.org/10.3133/ds975.
- Pashin, J.C., and Raymond, D.E., 2004, Glacial-eustatic control of coalbed methane reservoir distribution (Pottsville Formation; Lower Pennsylvanian) in the Black Warrior Basin of Alabama: Tuscaloosa, Alabama, University of Alabama College of Continuing Studies, 2004 International Coalbed Methane Symposium Proceedings, Paper 0413, 15 p.
- Pashin, J.C., 2007, Hydrodynamics of Coalbed Methane Reservoirs in the Black Warrior Basin: Key to Understanding Reservoir Performance and Environmental Issues, Applied Geochemistry, v. 22, I. 10, p. 2257-2272.
- Raymond, D.E., Osborne, W.E., Copeland, C.W. Jr, and Neathery, T.L., 1988, Alabama Stratigraphy: Alabama Geological Survey Circular, v. 140, p. 1-97.
- Sapp, C.D., and Emplaincourt, J., 1975, Physiographic regions of Alabama, Special Map 168, Geological Survey of Alabama.
- Stricklin, V.E., 1989, Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama: Area 3, U.S. Geological Survey, Water-Resources Investigations Report 88-4120.

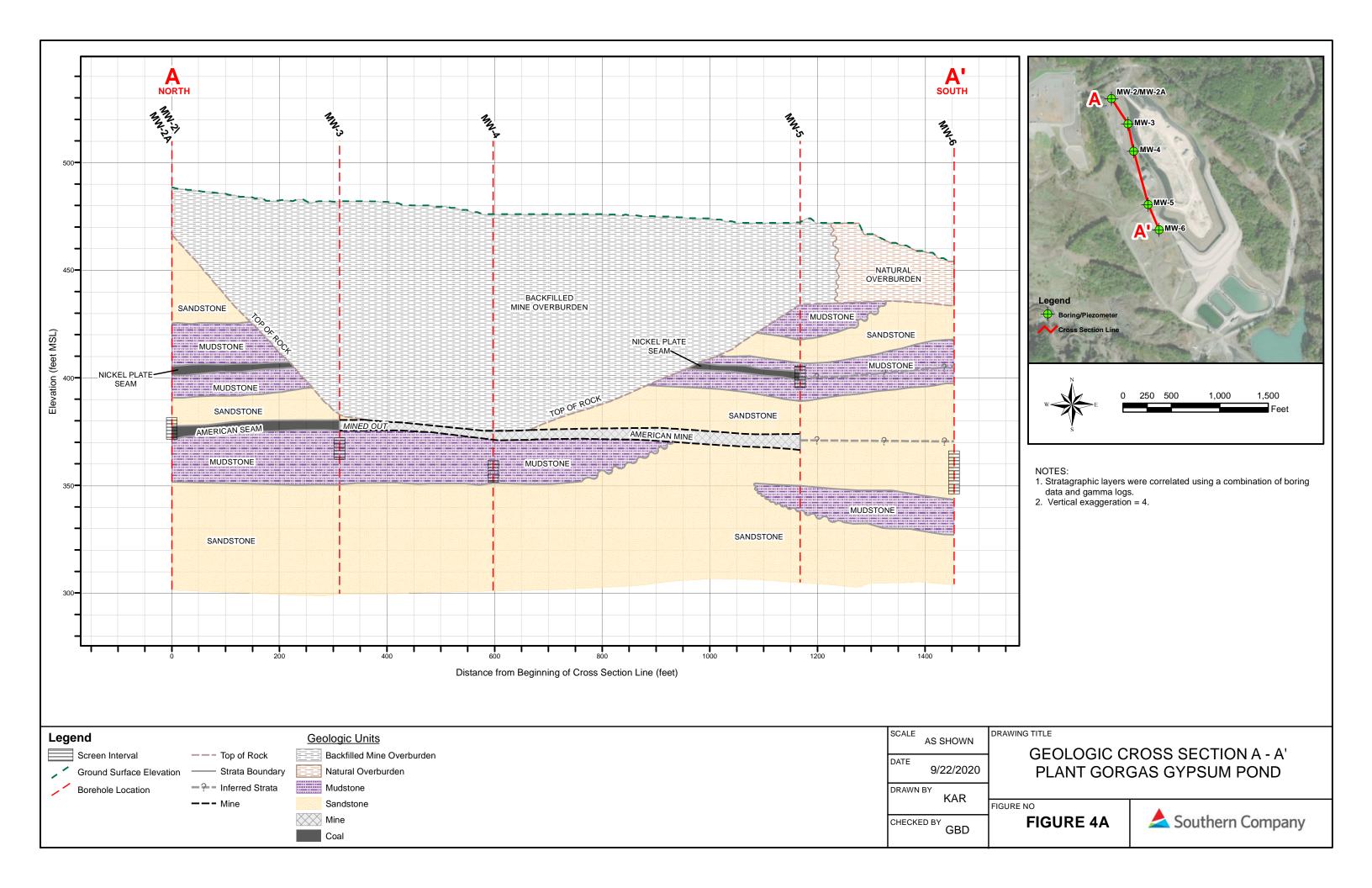
- USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance.
- USEPA. 2011. Data Validation Standard Operating Procedures. Science and Ecosystem Support Division. Region IV. September.
- USEPA. 2014. National Functional Guidelines for Inorganic Superfund Data Review. Office of Superfund Remediation and Technology Innovation (OSRTI). August.
- USEPA. 2015. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. 40 CFR Parts 257and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. [EPA-HQ-RCRA-2009–0640; FRL-9919-44-OSWER]. RIN-2050-AE81. April.
- United States Geological Survey (USGS), 1975 (Photo revised 1983), Goodsprings Quadrangle, 7.5 Minute Series Topographic Map.
- Ward II, W.E., Barnett, R.L., Rheams, L.J., 1989, Coal Resources of Walker County, Alabama, Geological Survey of Alabama, Special Map 205.

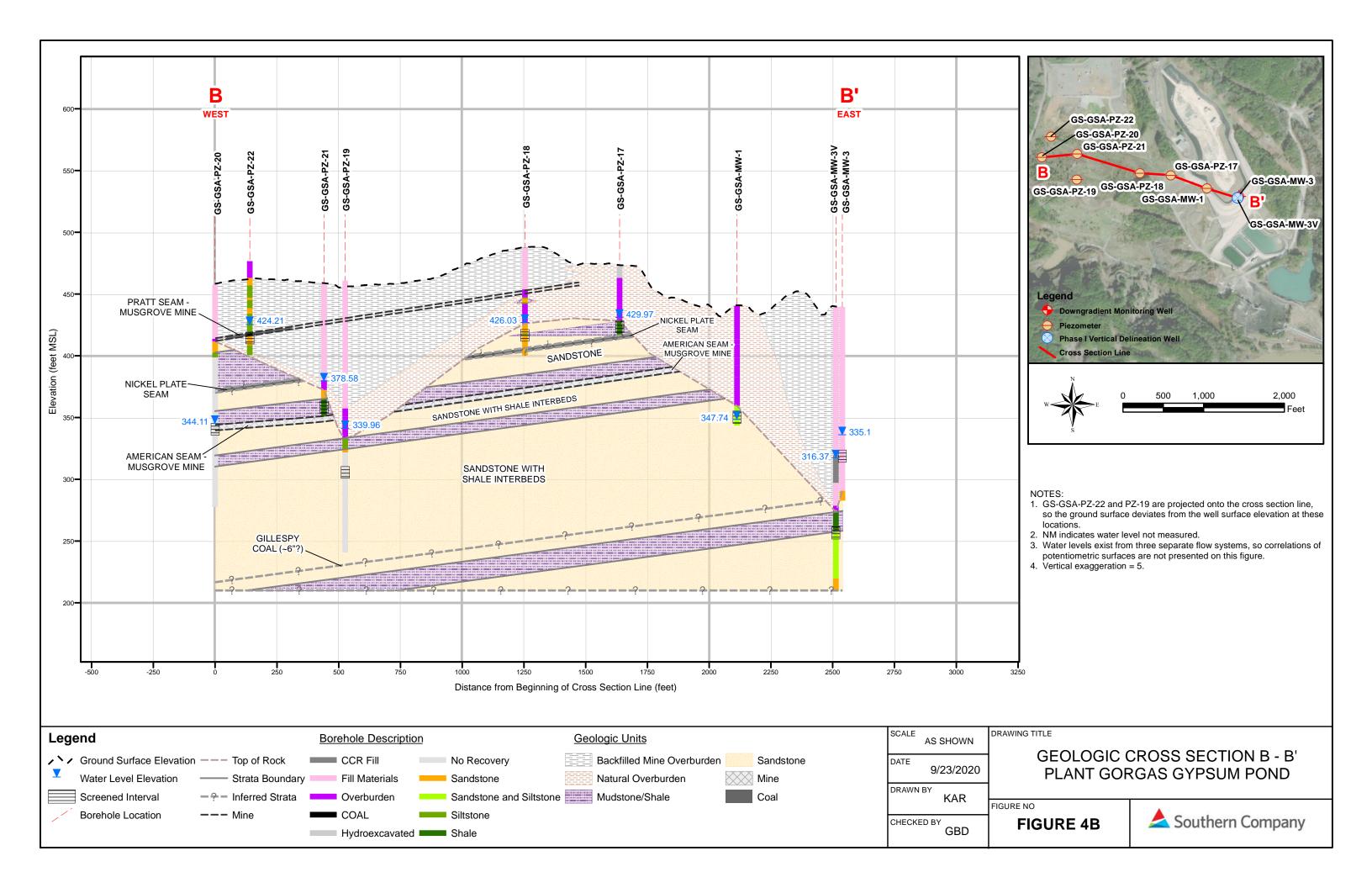
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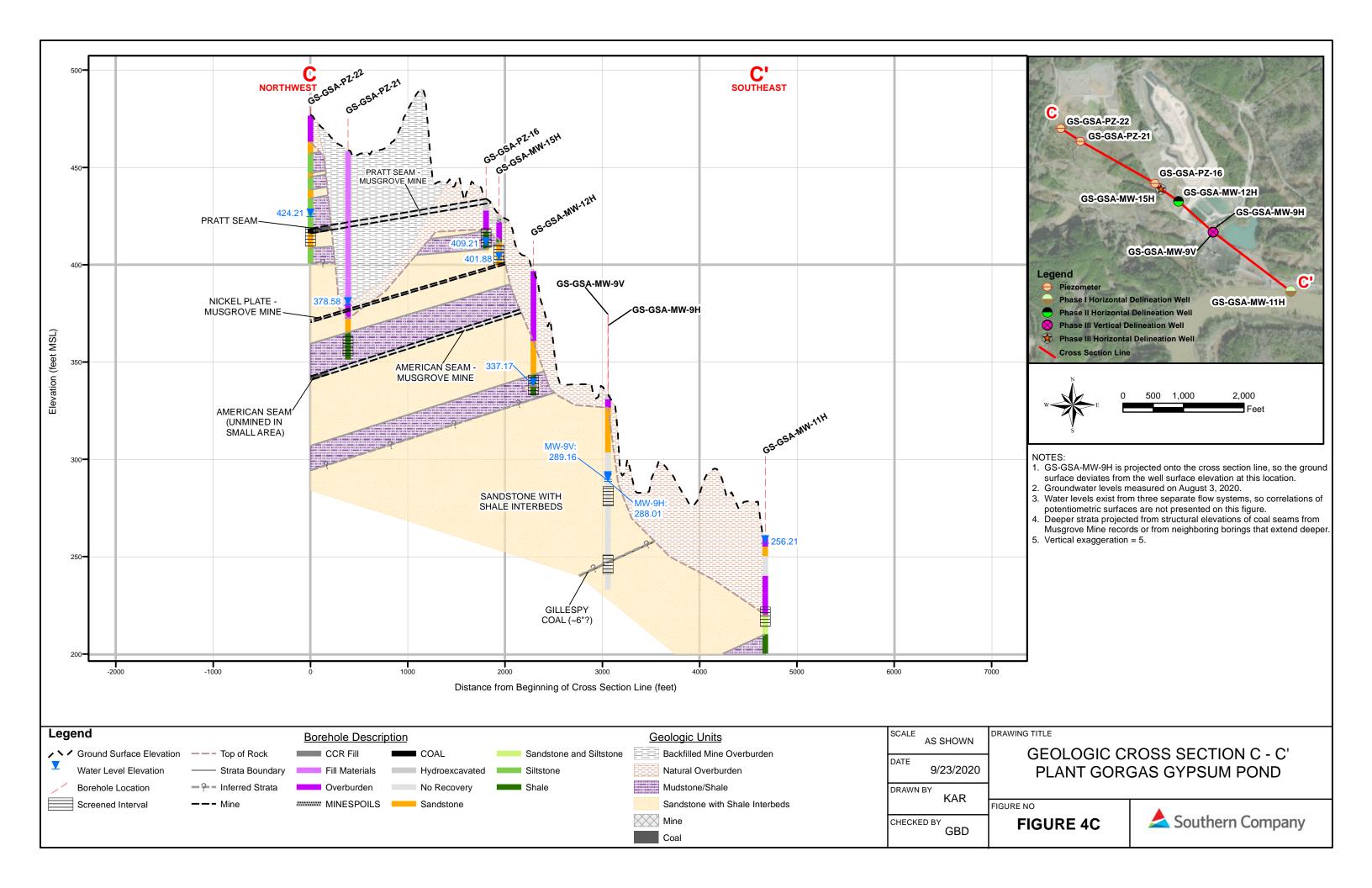


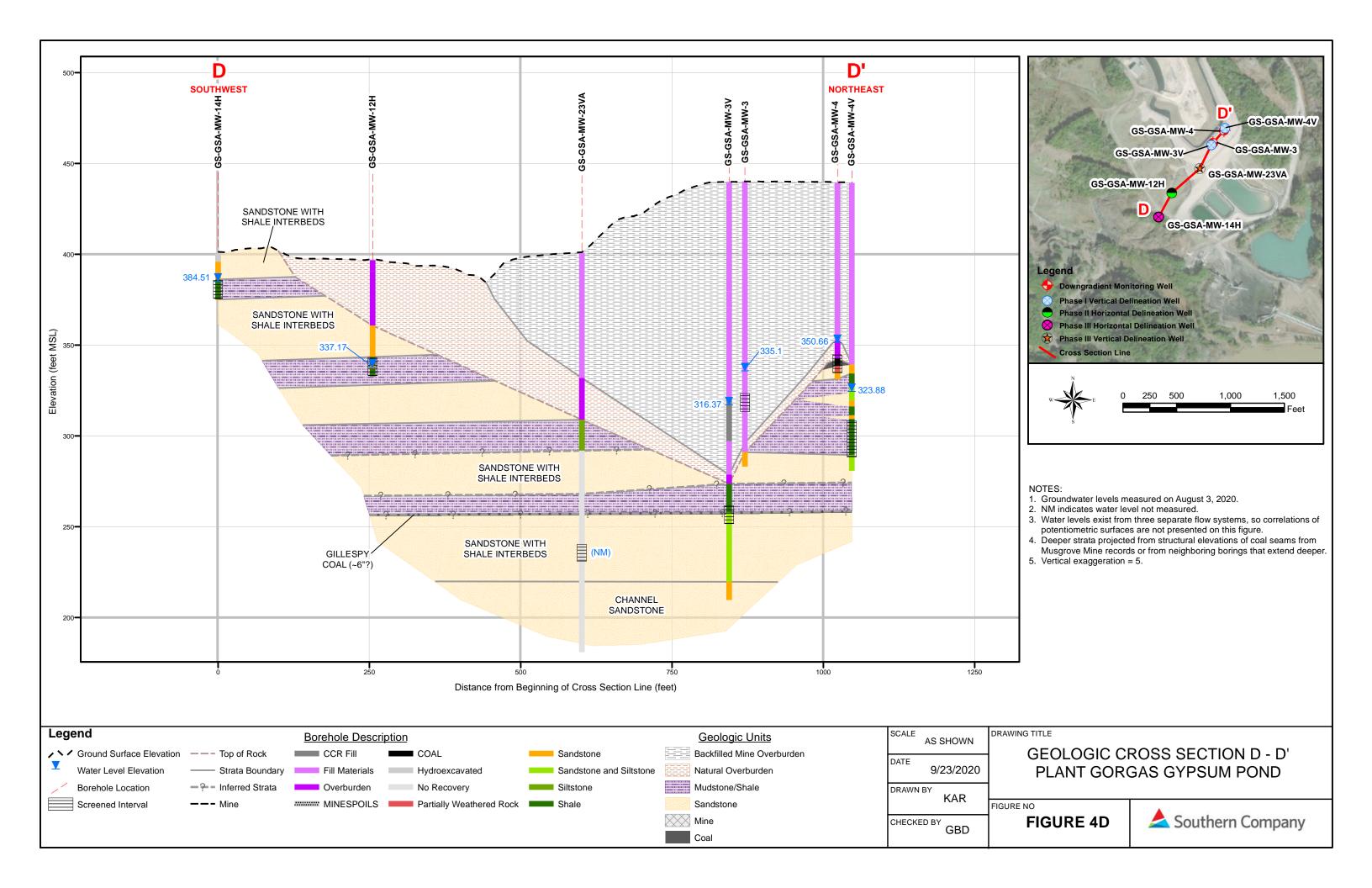


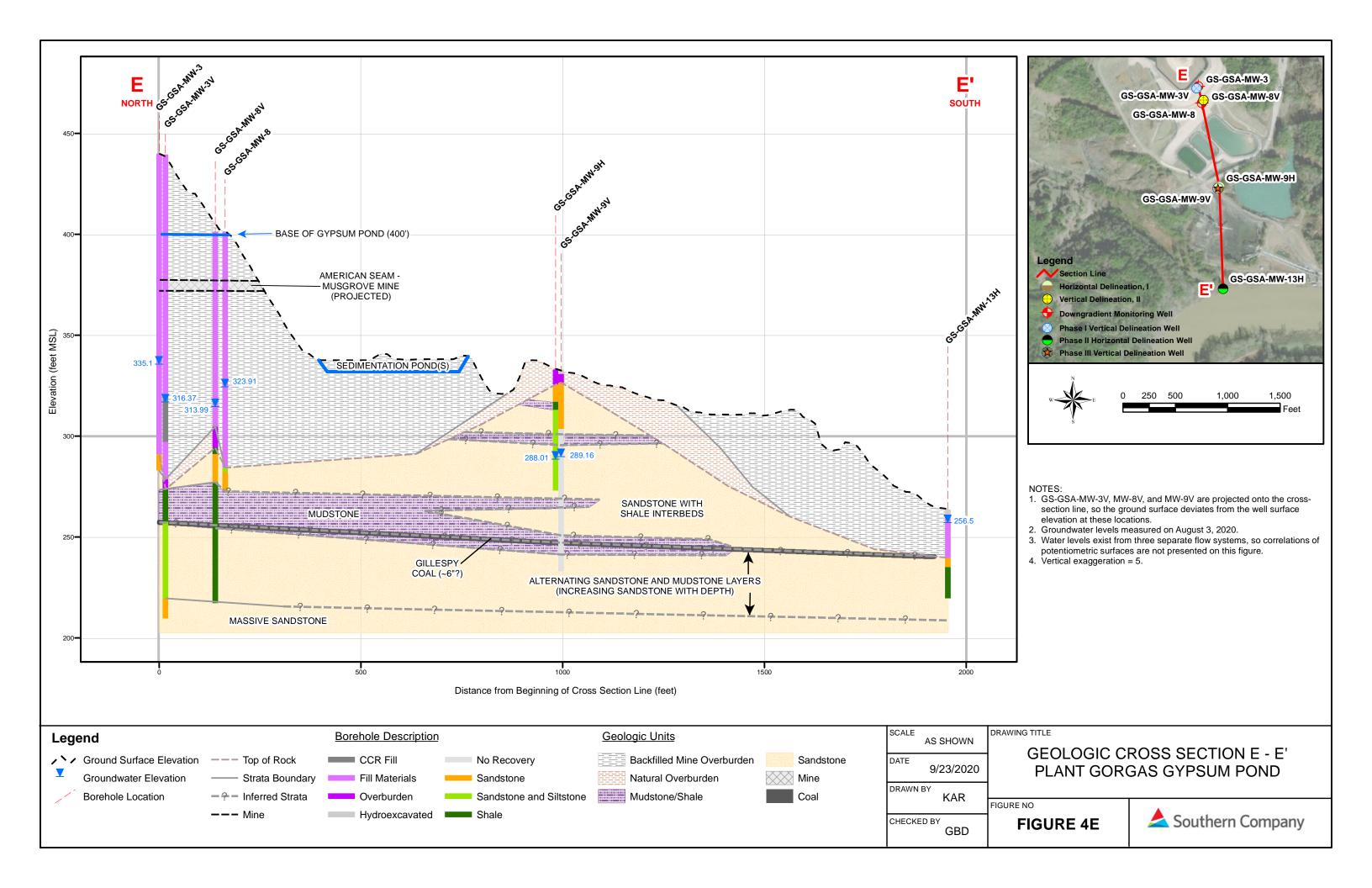


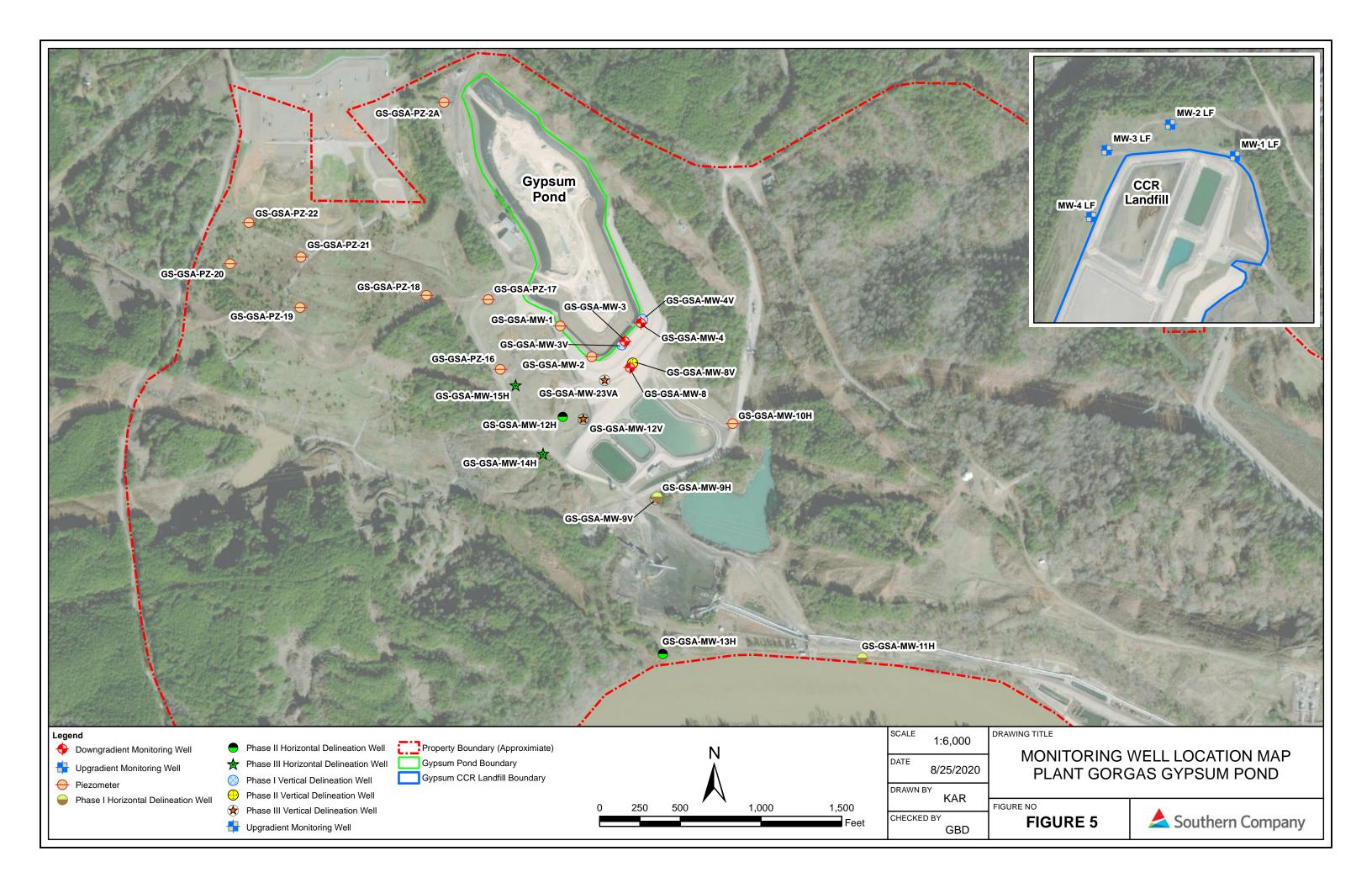


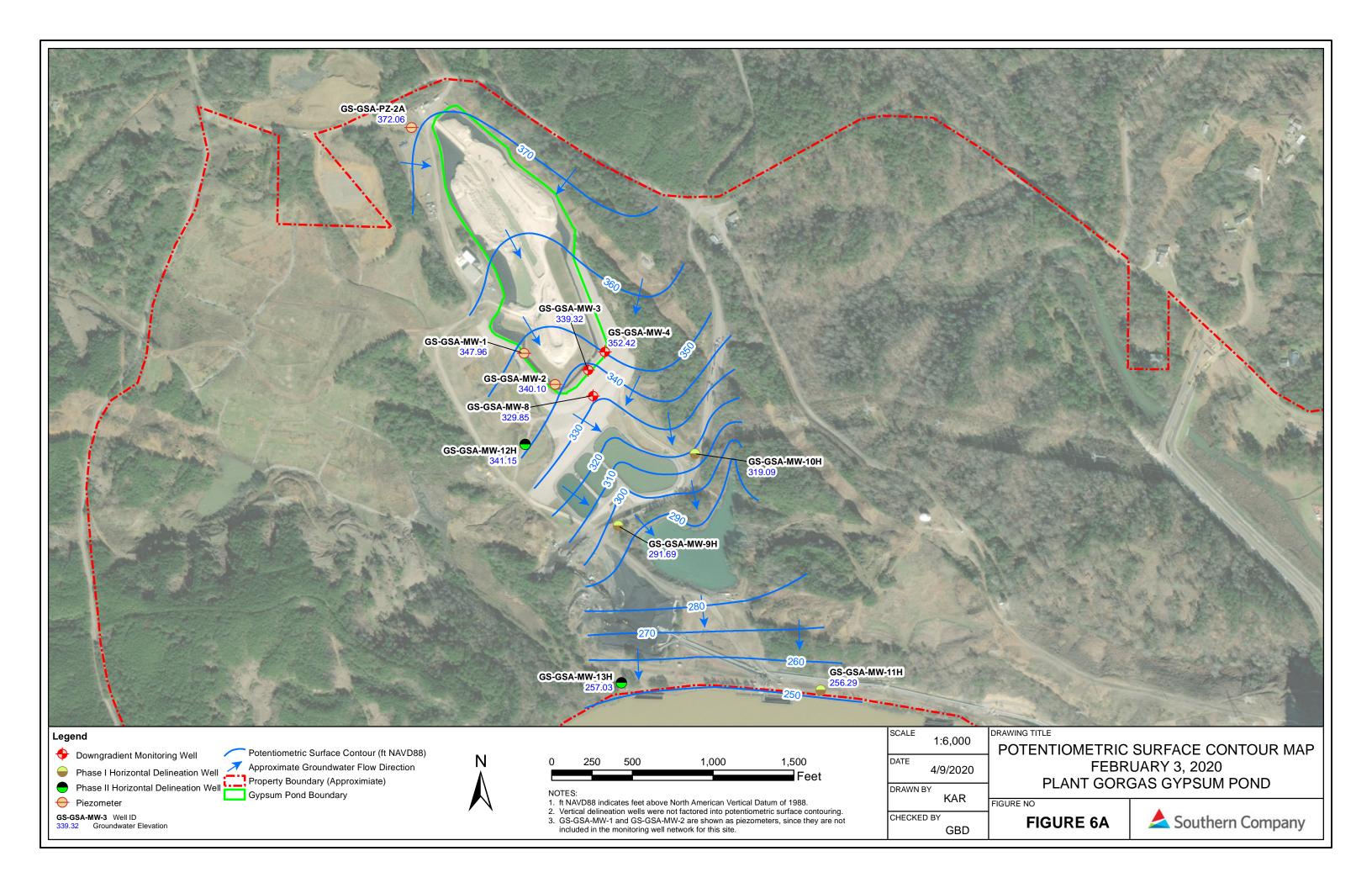


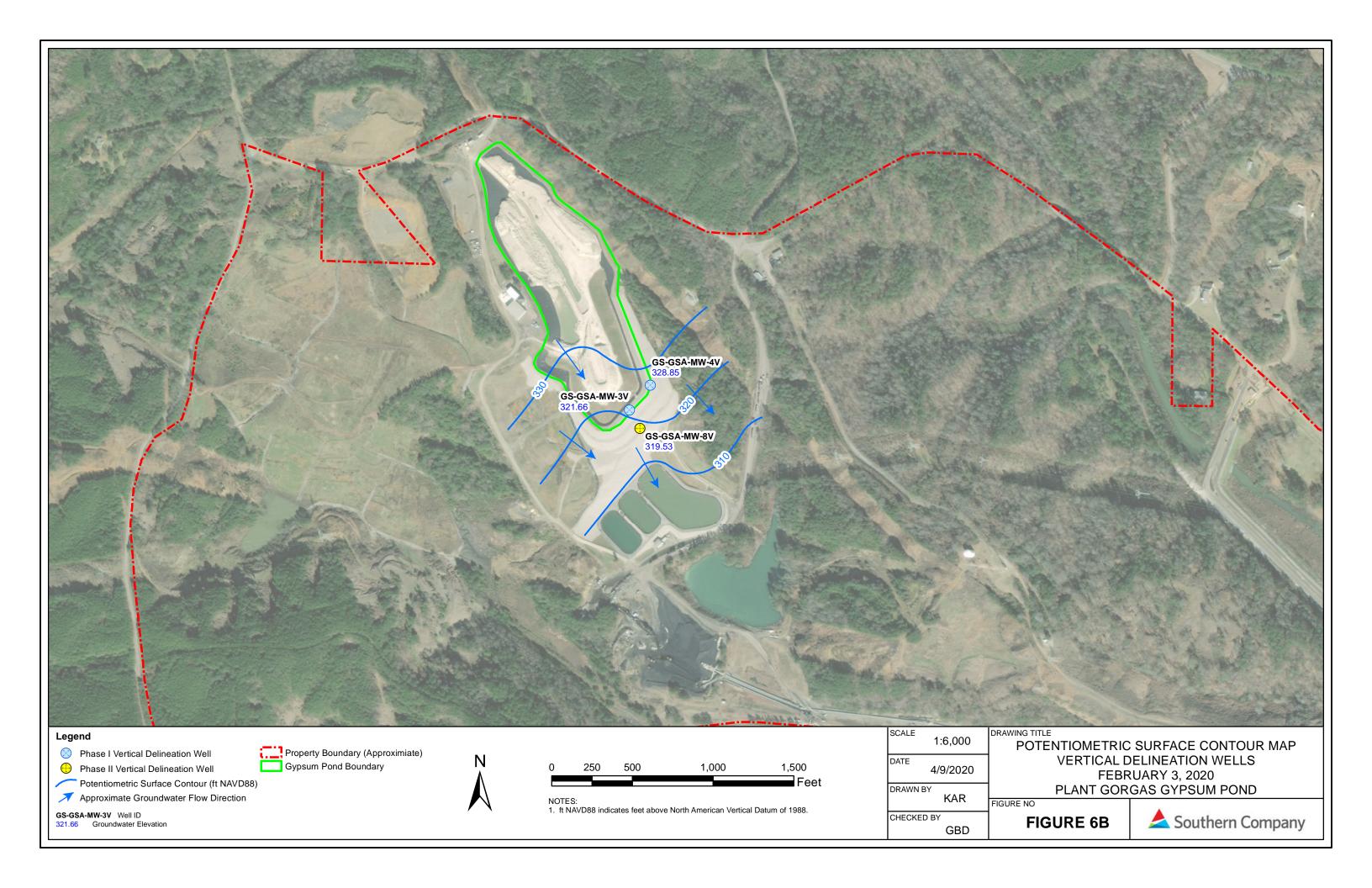


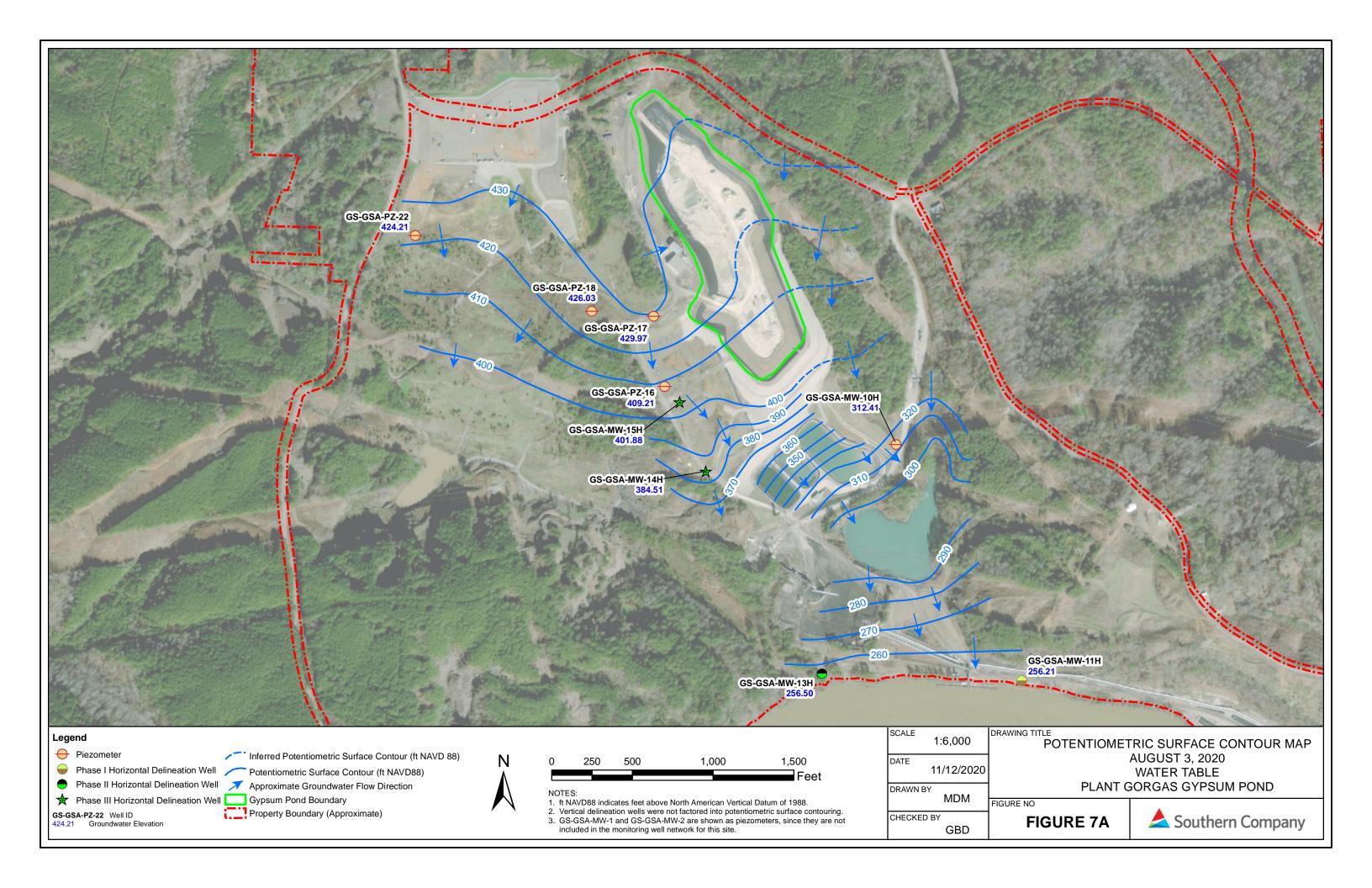


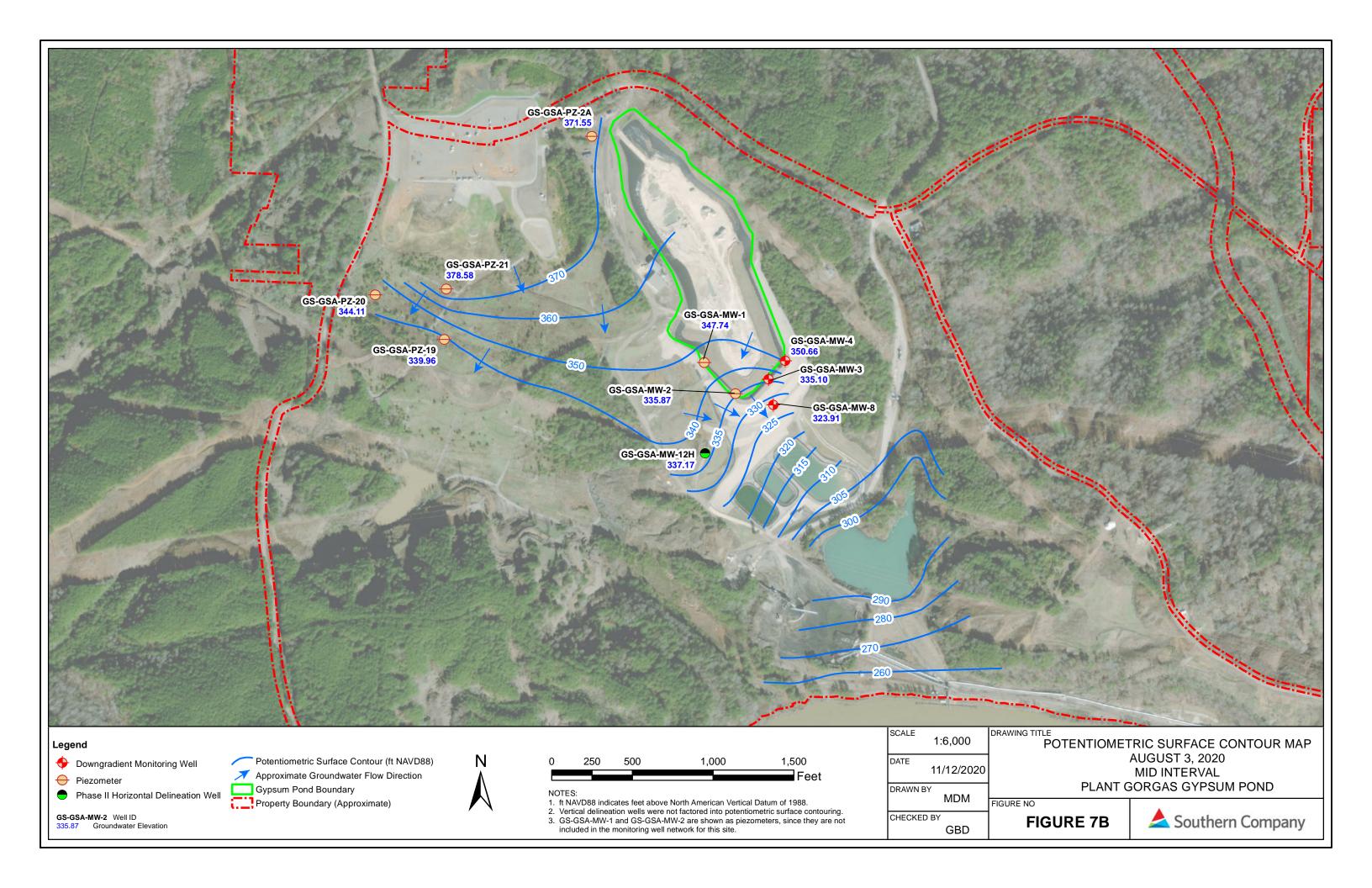


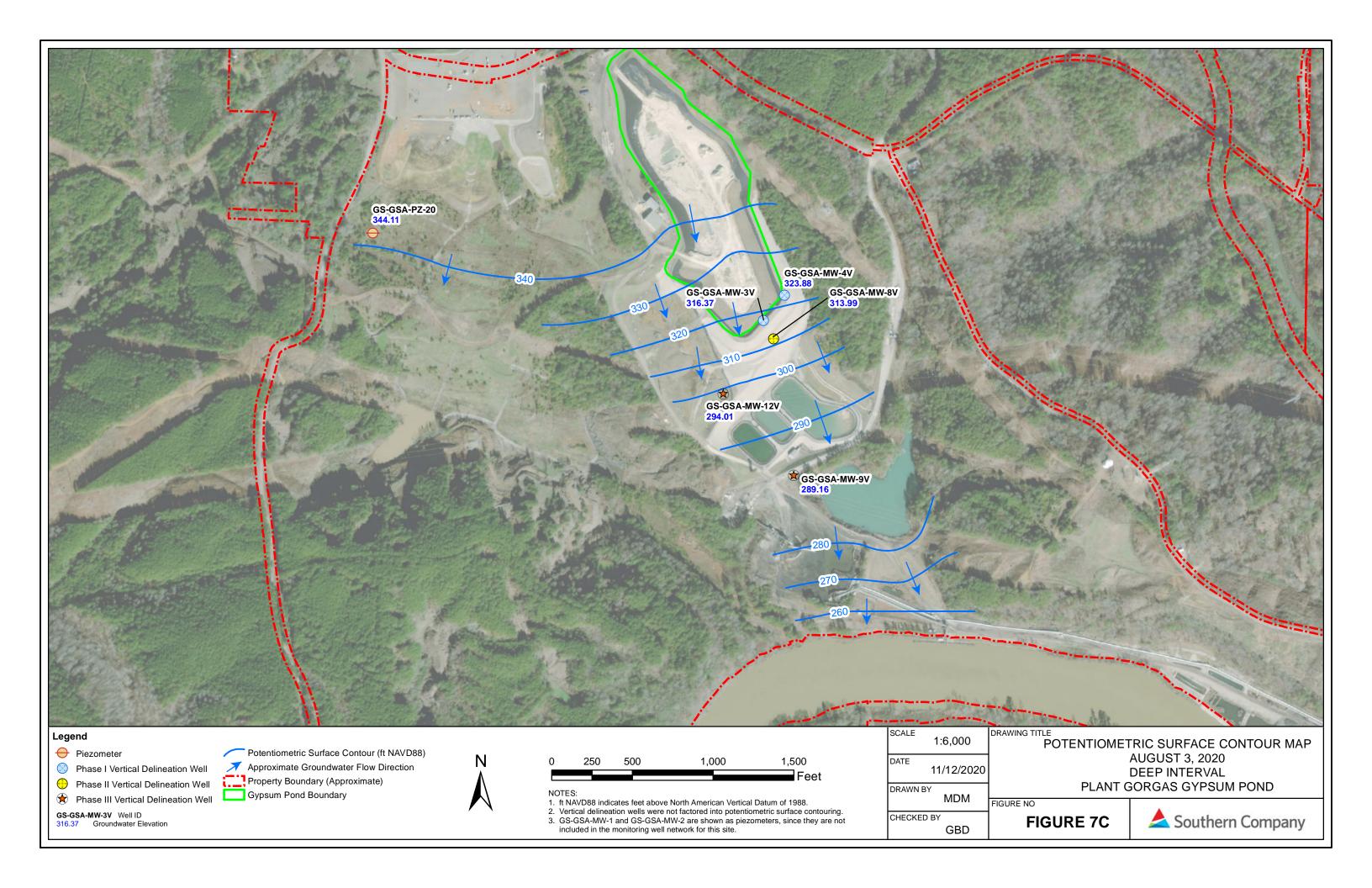












Tables

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
MW-1 LF	Upgradient	1/15/2014	1330794.064	594082.361	499.19	502.25	107.56	405.09	395.09	10
MW-2 LF	Upgradient	10/23/2014	1331053.309	593548.802	498.54	502.12	94.58	417.94	407.94	10
MW-3 LF	Upgradient	10/23/2014	1330842.402	593025.397	522.23	525.9	119.07	417.23	407.23	10
MW-4 LF	Upgradient	2/19/2012	1330289.727	592896.414	516.67	518.63	128.66	400.37	390.37	10
GS-GSA-MW-1	Piezometer	12/17/2015	1329217.055	2054372.147	440.48	442.96	97.70	355.26	345.26	10
GS-GSA-MW-2	Piezometer	12/16/2015	1329027.094	2054567.756	440.04	442.84	121.83	331.01	321.01	10
GS-GSA-PZ-2A	Piezometer	11/14/2015	1330604.858	2053653.171	488.67	491.52	122.40	379.12	369.12	10
GS-GSA-MW-3	Downgradient	12/8/2015	1329120.128	2054772.316	439.75	442.63	129.68	323.35	313.35	10
GS-GSA-MW-4	Downgradient	12/9/2015	1329235.421	2054872.732	439.44	442.10	107.86	344.64	334.64	10
GS-GSA-MW-8	Downgradient	12/20/2015	1328959.796	2054804.925	401.33	404.38	128.45	286.33	276.33	10
GS-GSA-MW-3V	Vertical Delineation	2/25/2019	1329100.49	2054755.12	439.60	442.68	191.58	261.60	251.60	10
GS-GSA-MW-4V	Vertical Delineation	2/25/2019	1329256.83	2054882.74	439.29	442.18	154.39	308.29	288.29	20
GS-GSA-MW-9H	Horizontal Delineation	2/3/2019	1328157.96	2054972.56	333.04	335.83	60.29	286.04	276.04	10
GS-GSA-MW-10H	Piezometer	2/4/2019	1328612.73	2055441.67	336.56	339.52	29.46	320.56	310.56	10
GS-GSA-MW-11H	Horizontal Delineation	2/6/2019	1327162.44	2056243.5	260.13	263.02	49.39	224.13	214.13	10
GS-GSA-MW-8V	Vertical Delineation	10/25/2019	1328988.15	2054820.84	401.24	404.43	158.50	235.94	245.94	10
GS-GSA-MW-12H	Horizontal Delineation	10/28/2019	1328654.77	2054387.54	396.73	399.73	67.50	342.23	332.23	10
GS-GSA-MW-13H	Horizontal Delineation	10/29/2019	1327186.88	2055007.85	263.63	266.46	34.90	241.80	231.80	10
GS-GSA-MW-9V	Vertical Delineation	5/12/2020	1328144.209	2054959.558	333.32	336.22	100	250.82	241.32	10
GS-GSA-MW-12V	Vertical Delineation	5/31/2020	1328641.801	2054514.475	376.76	379.5	160	258.26	248.76	10
GS-GSA-MW-14H	Horizontal Delineation	5/4/2020	1328429.824	2054266.453	400.86	403.66	26	385.66	375.66	10
GS-GSA-MW-15H	Horizontal Delineation	5/5/2020	1328854.76	2054096.767	425.62	428.16	26.5	410.12	400.32	10
GS-GSA-MW-23VA	Vertical Delineation	6/11/2020	1328882.096	2054647.848	400.84	403.6	300	240.34	230.84	10
GS-GSA-PZ-16	Piezometer	5/3/2020	1328948.994	2054001.89	433.79	436.4	26.5	418.49	408.99	10
GS-GSA-PZ-17	Piezometer	5/2/2020	1329382.193	2053926.605	473.03	475.94	56.5	428.23	418.73	10
GS-GSA-PZ-18	Piezometer	5/19/2020	1329407.961	2053543.873	487.2	489.93	87	421.3	411.8	10
GS-GSA-PZ-19	Piezometer	5/29/2020	1329331.642	2052760.375	460.82	463.5	220	310.32	300.82	10
GS-GSA-PZ-20	Piezometer	5/18/2020	1329602.517	2052327.495	457.65	460.34	180	345.15	335.65	10
GS-GSA-PZ-22	Piezometer	5/16/2020	1329857.56	2052443.676	476.56	479.46	76	419.06	409.56	10
GS-GSA-PZ-21	Piezometer	5/14/2020	1329645.275	2052766.308	458.21	460.94	107	363.31	353.31	10

- 1. Northing and easting are in feet relative to the State Plane Alabama West North America Datum of 1983.
- 2. Elevations are in feet relative to the North American vertical Datum of 1988.
- 3. Piezometers are utilized for water level readings only.
- 3. Top of screen and bottom of screen depths are calculated relative Top of Casing elevation .
- 5. MSL Mean Sea Level
- 6. LF = Monitor well located at the CCR Landfill

Table 2. Monitoring Parameters and Reporting Limits

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

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

Table 3 **Groundwater Elevations Summary**

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

- 1. ft. AMSL feet above mean sea level
- 2. -- Not Measured3. Upgradient monitoring well located at the CCR Landfill

Table 3 **Groundwater Elevations Summary**

Well Name	Top of Casing Elevation	Groundwater Elevation (ft.)									
		2/13/2018	6/11/2018	10/17/2018	3/4/2019	3/13/2019	4/10/2019	10/14/2019	11/26/2019	2/3/2020	8/3/2020
MW-1 ³	502.38	411.02	411.41	410.78		412.24	412.08	410.85		411.94	412.32
MW-2 ³	502.17	419.34	417.08	416.44	-	417.75	421.20	416.67		417.57	417.15
MW-3 ³	525.90	418.49	415.77	414.92	-	418.31	417.41	415.14		416.62	415.49
MW-4 ³	517.89	401.93	401.27	399.56	-	401.94	402.12	399.59		401.68	400.63
GS-GSA-MW-3	442.63	332.79	336.36	332.37		341.46	341.33	332.37		339.32	335.10
GS-GSA-MW-4	442.10	353.06	351.52	349.56		353.06	353.00	349.08		352.42	350.66
GS-GSA-MW-8	404.38	320.01	324.40	319.03		334.46	330.27	319.20		329.85	323.91
GS-GSA-MW-3V	442.68				327.13	326.34		313.29		321.66	316.37
GS-GSA-MW-4V	442.18				333.31	332.35		322.28		328.85	323.88
GS-GSA-MW-9H	335.83				294.33	293.64		286.47		291.69	288.01
GS-GSA-MW-10H	339.52					321.80				319.09	312.41
GS-GSA-MW-11H	263.02				257.01	256.30		255.09		256.29	256.21
GS-GSA-MW-8V	404.43								310.82	319.53	313.99
GS-GSA-MW-12H	399.73								339.57	341.15	337.17
GS-GSA-MW-13H	266.46								257.06	257.03	256.50
GS-GSA-MW-1	442.96									347.96	347.74
GS-GSA-MW-2	442.84									340.10	335.87
GS-GSA-PZ-2A	491.52									372.06	371.55
GS-GSA-MW-9V	336.22										289.16
GS-GSA-MW-12V	379.50										294.01
GS-GSA-MW-14H	403.66										384.51
GS-GSA-MW-15H	428.16										401.88
GS-GSA-MW-23VA	403.60										
GS-GSA-PZ-16	436.40										409.21
GS-GSA-PZ-17	475.94										429.97
GS-GSA-PZ-18	489.93										426.03
GS-GSA-PZ-19	463.50										339.96
GS-GSA-PZ-20	460.34										344.11
GS-GSA-PZ-22	479.46										424.21
GS-GSA-PZ-21	460.94										378.58

- 1. ft. AMSL feet above mean sea level
- 2. -- Not Measured3. Upgradient monitoring well located at the CCR Landfill

Table 4
Horizontal Groundwater Flow Velocity Calculations

				SA01 2020				
Date	MW-3	MW-8	Distance	Hydraulic Gradient	Hydraulic Conductivity	Effective Porosity	Calculated Groundwater Flow Velocity	Calculated Groundwater Flow Velocity
	h ₁ (ft)	h ₂ (ft)	Δl (ft)	Δh/Δl (ft/ft)	K (ft/day)	n	(ft/d)	(ft/yr)
2/3/2020	339.32	329.85	165.30	0.057	8.01	0.15	3.06	1116.64

SA02 2020

Date	MW-3	MW-8	Distance	Hydraulic Gradient	Hydraulic Conductivity	Effective Porosity	Calculated Groundwater Flow Velocity	Calculated Groundwater Flow Velocity
	h ₁ (ft)	h ₂ (ft)	Δl (ft)	$\Delta h/\Delta l$ (ft/ft)	K (ft/day)	n	(ft/d)	(ft/yr)
8/3/2020	335.1	323.91	165.30	0.068	8.01	0.15	3.61	1319.45

Notes:

ft=feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year

Table 5. Relative Percent Difference Calculations

	2020 1st Semi-Annual Monitoring Event									
		Monitoring Po	oint Identification	Relative Percent						
Parameter	Units	MW-2	MW-2 Dup	Difference (RPD %)						
Barium	mg/L	0.0122	0.0117	4.2						
Calcium	mg/L	172	182	5.6						
Chloride	mg/L	2.48	2.53	2.0						
Cobalt	mg/L	0.0193	0.0191	1.0						
Fluoride	mg/L	0.182	0.182	0.0						
Lithium	mg/L	0.0534	0.0538	0.7						
pН	SU	5.95	5.95	0.0						
Sulfate	mg/L	803	814	1.4						
TDS	mg/L	1440	1430	0.7						

Parameter	Units	Monitoring Po	oint Identification	Relative Percent	
1 at ameter	Cints	GS-GSA-MW-4	GS-GSA-MW-4 Dup	Difference (RPD %)	
Arsenic	mg/L	0.00128	0.00127	0.8	
Barium	mg/L	0.0124	0.0122	1.6	
Beryllium	mg/L	0.00415	0.00435	4.7	
Boron	mg/L	2.74	2.74	0.0	
Cadmium	mg/L	0.00143	0.00142	0.7	
Calcium	mg/L	116	115	0.9	
Chloride	mg/L	43.2	42.8	0.9	
Cobalt	mg/L	0.217	0.218	0.5	
Lithium	mg/L	0.29	0.288	0.7	
pН	SU	3.83	3.83	0.0	
Sulfate	mg/L	571	573	0.3	
TDS	mg/L	978	986	0.8	

2020 2nd Semi-Annual Monitoring Event									
_		Monitoring Po	int Identification	Relative Percent					
Parameter	Units	GS-GSA-PZ-20	GS-GSA-PZ-20 Dup	Difference (RPD %)					
Boron	mg/L	0.0833	0.0822	1.3					
Calcium	mg/L	76.9	77.3	0.5					
Chloride	mg/L	15	15.1	0.7					
Fluoride	mg/L	0.188	0.183	2.7					
Sulfate	mg/L	379	393	3.6					
TDS	mg/L	798	792	0.8					
pН	SU	6.03	6.03	0.0					
Arsenic	mg/L	0.00214	0.0021	1.9					
Barium	mg/L	0.0211	0.02	5.4					
Cobalt	mg/L	0.00734	0.00741	0.9					
Lithium	mg/L	0.102	0.101	1.0					

Parameter	Units	Monitoring Po	Relative Percent	
	Cints	MW-1 LF	MW-1 LF Dup	Difference (RPD %)
Calcium	mg/L	148	148	0.0
Chloride	mg/L	2.05	2.06	0.5
Sulfate	mg/L	1370	1480	7.7
TDS	mg/L	2200	2200	0.0
pН	SU	5.08	5.08	0.0
Barium	mg/L	0.0107	0.0103	3.8
Cadmium	mg/L	0.00237	0.00219	7.9
Cobalt	mg/L	0.0722	0.0711	1.5
Lithium	mg/L	0.0259	0.0262	1.2
Selenium	mg/L	0.00278	0.00245	12.6

Table 6.
Summary of Background Levels and Groundwater Protection Standards

Analyte	Units	Background	GWPS
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.01531	2
Beryllium	mg/L	0.0121	0.004
Cadmium	mg/L	0.00598	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	1.07	1.07
Combined Radium-226/228	pCi/L	1.151	5
Fluoride	mg/L	0.5302	4
Lead	mg/L	0.00692	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01	0.1
Selenium	mg/L	0.0158	0.05
Thallium	mg/L	0.001	0.002

^{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).

Table 7.
First Semi-Annual Monitoring Event Analytical Summary

				Field Parameters		
WELL	SAMPLE DATE	DO	ORP	Temperature	Conductivity	Turbidity
UNITS		mg/L	mv	С	uS/cm	NTU
MW-1	2/3/2020	0.82	123.43	19.79	2376.80	0.52
MW-2	2/3/2020	0.23	88.19	19.09	1697.19	0.61
MW-3	2/3/2020	5.63	131.47	21.57	3312.09	0.96
MW-4	2/3/2020	2.91	124.13	20.34	3119.33	0.41
GS-GSA-MW-3	2/3/2020	0.22	-14.71	20.43	4133.61	3.56
GS-GSA-MW-4	2/4/2020	0.29	298.36	19.91	1221.02	4.79
GS-GSA-MW-8	2/4/2020	0.29	-47.90	19.85	3470.58	1.60
GS-GSA-MW-3V	2/3/2020	0.75	-51.26	21.33	3331.61	1.28
GS-GSA-MW-4V	2/3/2020	0.38	33.95	19.72	1481.03	2.76
GS-GSA-MW-8V	2/5/2020	0.51	-309.03	20.25	1739.73	1.21
GS-GSA-MW-9H	2/4/2020	0.22	118.73	20.45	3250.54	3.91
GS-GSA-MW-11H	2/4/2020	0.17	55.02	19.26	1472.55	6.12
GS-GSA-MW-12H	2/4/2020	0.27	256.14	19.23	1706.04	4.82
GS-GSA-MW-13H	2/4/2020	0.15	-3.51	19.29	1502.46	1.52

- 2. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
- 3. U Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
- 4. (+) U* indicates validation flag applied to samples were equipment blank or field blank limit exceedances potentially biased samples
- 5. TDS Total Dissolved Solids

^{1.} J value indicates the result is greater that or equal to the Method Detection Limit (MDL) and less that the Practical Quantitation Limit (PQL). Values are displayed as less than the PQL with a J.

Table 7.
First Semi-Annual Monitoring Event Analytical Summary

					APPENDIX III			
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS
UN	ITS	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
MW-1	2/3/2020	Non-Detect	172	2.07	0.0982(J)	5	1510	2380
MW-2	2/3/2020	Non-Detect	172	2.48	0.182	5.95	803	1440
MW-3	2/3/2020	Non-Detect	276	2.12	0.256	5.54	2290	3530
MW-4	2/3/2020	0.0433(J)	265	1.72	0.37	6.14	1920	3240
GS-GSA-MW-3	2/3/2020	2.13	589	267	0.427	5.98	2840	4920
GS-GSA-MW-4	2/4/2020	2.74	116	43.2	Non-Detect	3.83	571	978
GS-GSA-MW-8	2/4/2020	1.47	461	94.1	0.132	6.85	1570	3190
GS-GSA-MW-3V	2/3/2020	3.06	504	338	0.438	5.88	1970	3660
GS-GSA-MW-4V	2/3/2020	5.25	184	101	0.555	5.84	808	1290
GS-GSA-MW-8V	2/5/2020	0.136	37.3	9.05	0.162	7.48	223	1100
GS-GSA-MW-9H	2/4/2020	9.63	413	139	0.205	5.34	1710	3110
GS-GSA-MW-11H	2/4/2020	Non-Detect	163	4.27	0.0743(J)	6.02	725	1200
GS-GSA-MW-12H	2/4/2020	0.0748(J)	158	2.34	Non-Detect	4.57	978	1580
GS-GSA-MW-13H	2/4/2020	0.202	171	12.9	0.115	6	720	1200

- 1. J value indicates the result is greater that or equal to the Method Detection Limit (MDL) and less that the Practical Quantitation Limit (PQL). 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 measurment.
- 4. (+) U* indicates validation flag applied to samples were equipment blank or field blank limit exceedances potentially biased samples
- 5. TDS Total Dissolved Solids

Table 7.
First Semi-Annual Monitoring Event Analytical Summary

					APPENDIX IV			
WELL	SAMPLE DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt
UN	ITS	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-1	2/3/2020	Non-Detect	Non-Detect	0.00995(J)	Non-Detect	0.00182	Non-Detect	0.0495
MW-2	2/3/2020	Non-Detect	Non-Detect	0.0122	Non-Detect	Non-Detect	Non-Detect	0.0193
MW-3	2/3/2020	Non-Detect	Non-Detect	0.0086(J)	Non-Detect	0.000988(J)	Non-Detect	0.0114
MW-4	2/3/2020	Non-Detect	Non-Detect	0.0103	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	2/3/2020	Non-Detect	Non-Detect	0.0141	0.00141(J)	Non-Detect	Non-Detect	0.0843
GS-GSA-MW-4	2/4/2020	Non-Detect	0.00128(J)	0.0124	0.00415	0.00143	Non-Detect	0.217
GS-GSA-MW-8	2/4/2020	Non-Detect	Non-Detect	0.0209	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3V	2/3/2020	Non-Detect	Non-Detect	0.0215	Non-Detect	Non-Detect	Non-Detect	0.0135
GS-GSA-MW-4V	2/3/2020	Non-Detect	0.00101(J)	0.0103	0.00362	Non-Detect	Non-Detect	0.108
GS-GSA-MW-8V	2/5/2020	Non-Detect	0.00232(J)	0.096	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-9H	2/4/2020	Non-Detect	0.00123(J)	0.0148	0.000929(J)	0.000349(J)	Non-Detect	0.159
GS-GSA-MW-11H	2/4/2020	Non-Detect	Non-Detect	0.0148	Non-Detect	Non-Detect	Non-Detect	0.00582
GS-GSA-MW-12H	2/4/2020	Non-Detect	0.00157(J)	0.0141	0.00709	0.00301	Non-Detect	0.351
GS-GSA-MW-13H	2/4/2020	Non-Detect	0.16	0.0296	Non-Detect	Non-Detect	Non-Detect	0.0442

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- 2. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
- 3. U Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
- 4. (+) U* indicates validation flag applied to samples were equipment blank or field blank limit exceedances potentially biased samples
- 5. TDS Total Dissolved Solids

Table 7.
First Semi-Annual Monitoring Event Analytical Summary

					APPEN	DIX IV			
WELL	SAMPLE DATE	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UN	ITS	pCi/L	mg/L						
MW-1	2/3/2020	0.521(U)	0.0982(J)	Non-Detect	0.0292	Non-Detect	Non-Detect	0.00272(J)	Non-Detect
MW-2	2/3/2020	-0.0245(U)	0.182	Non-Detect	0.0534	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-3	2/3/2020	0.0246(U)	0.256	Non-Detect	0.0825	Non-Detect	Non-Detect	0.012	Non-Detect
MW-4	2/3/2020	0.254(U)	0.37	Non-Detect	0.0556	Non-Detect	Non-Detect	0.00212(J)	Non-Detect
GS-GSA-MW-3	2/3/2020	0.28(U)	0.427	Non-Detect	0.474	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4	2/4/2020	0.324(U)	Non-Detect	Non-Detect	0.29	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	2/4/2020	0.336(U)	0.132	Non-Detect	0.188	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3V	2/3/2020	0.408(U)	0.438	Non-Detect	0.46	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4V	2/3/2020	0.758	0.555	Non-Detect	0.332	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8V	2/5/2020	0.576	0.162	Non-Detect	0.327	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-9H	2/4/2020	0.441(U)	0.205	Non-Detect	0.203	Non-Detect	Non-Detect	Non-Detect	0.000233(J)
GS-GSA-MW-11H	2/4/2020	0.319(U)	0.0743(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-12H	2/4/2020	0.939	Non-Detect	0.00334(J)	0.394	Non-Detect	Non-Detect	Non-Detect	0.000491(J)
GS-GSA-MW-13H	2/4/2020	0.624	0.115	Non-Detect	0.0506	Non-Detect	Non-Detect	Non-Detect	Non-Detect

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- 2. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
- 3. U Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
- 4. (+) U* indicates validation flag applied to samples were equipment blank or field blank limit exceedances potentially biased samples
- 5. TDS Total Dissolved Solids

Table 7.
First Semi-Annual Monitoring Event Analytical Summary

				Field Parameters		
WELL	SAMPLE DATE	DO	ORP	Temperature	Conductivity	Turbidity
UNITS		mg/L	mv	С	uS/cm	NTU
MW-1	8/3/2020	0.48	286.16	20.09	1647.17	2.06
MW-2	8/3/2020	0.28	59.52	20.21	1280.91	3.65
MW-3	8/3/2020	1.44	206.72	24.12	2198.42	6.72
MW-4	8/5/2020	1.68	145.45	20.77	2442.43	4.87
GS-GSA-MW-3	8/4/2020	0.15	-31.98	21.3	4345.17	8.88
GS-GSA-MW-4	8/5/2020	0.27	304.37	21.53	1150.86	8.94
GS-GSA-MW-8	8/5/2020	0.22	-110.97	22.37	3686.49	3.86
GS-GSA-MW-3V	8/4/2020	0.62	-10.43	25.2	3805.18	1.01
GS-GSA-MW-4V	8/5/2020	0.44	35.35	21.7	1386.95	9.04
GS-GSA-MW-8V	8/5/2020	0.21	-284.84	22.32	1635.82	1.62
GS-GSA-MW-9H	8/4/2020	0.44	115.04	22.1	2019.87	8.29
GS-GSA-MW-9V	8/4/2020	0.93	-89.8	25.02	2563.32	3.07
GS-GSA-MW-11H	8/4/2020	0.33	60.84	20.41	1267.37	9.44
GS-GSA-MW-12H	8/5/2020	0.23	349.81	20.32	1325.81	7.94
GS-GSA-MW-12V	8/5/2020	0.19	-42.27	20.1	3604.38	6.84
GS-GSA-MW-13H	8/4/2020	0.23	-17.01	20.11	1199.6	4.08
GS-GSA-MW-14H	8/5/2020	0.29	291.85	20.84	1379.37	2.93
GS-GSA-PZ-17	8/4/2020	0.38	288.29	23.57	1883.1	5.56
GS-GSA-PZ-18	8/3/2020	0.7	250.58	21.91	1297.6	0.86
GS-GSA-PZ-19	8/3/2020	0.2	-30.67	18.97	1176.09	3.77
GS-GSA-PZ-20	8/3/2020	0.31	-3.01	19.53	1185.16	4.15
GS-GSA-PZ-21	8/4/2020	0.26	-93.39	19.38	762.82	1.86
GS-GSA-PZ-22	8/4/2020	0.22	-86.46	18.94	863.41	1.3

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

Table 7.
First Semi-Annual Monitoring Event Analytical Summary

					APPENDIX III			
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS
UNITS	S	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
MW-1	8/3/2020	Non-Detect	148	2.05	Non-Detect	5.08	1370	2200
MW-2	8/3/2020	0.0317(J)	172	4.03	0.122	5.95	907	1650
MW-3	8/3/2020	0.0424(J)	285	1.17	0.0766(J)	5.06	2330	3760
MW-4	8/5/2020	0.0459(J)	281	1.57	0.359	6.15	1930	3200
GS-GSA-MW-3	8/4/2020	1.82	545	222	0.389	6.09	2820	5110
GS-GSA-MW-4	8/5/2020	2.51	94.7	41	Non-Detect	3.86	519	938
GS-GSA-MW-8	8/5/2020	2.16	497	146	0.119	6.76	1880	3610
GS-GSA-MW-3V	8/4/2020	2.8	443	305	0.349	5.9	1860	3530
GS-GSA-MW-4V	8/5/2020	4.41	167	80.9	0.363	5.81	761	1330
GS-GSA-MW-8V	8/5/2020	0.131	31.9	13.9	0.256	7.58	243	1100
GS-GSA-MW-9H	8/4/2020	8.53	346	109	0.127	5.33	1790	2920
GS-GSA-MW-9V	8/4/2020	0.149	434	58.6	0.135	6.88	1700	3080
GS-GSA-MW-11H	8/4/2020	Non-Detect	139	4.51	0.109	5.74	694	1230
GS-GSA-MW-12H	8/5/2020	0.0748(J)	126	2	Non-Detect	4.13	811	1380
GS-GSA-MW-12V	8/5/2020	1.55	350	159	0.217	6.15	1830	3330
GS-GSA-MW-13H	8/4/2020	0.263	192	12.7	0.113	5.89	773	1350
GS-GSA-MW-14H	8/5/2020	0.158	141	3.28	0.082(J)	3.83	796	1280
GS-GSA-PZ-17	8/4/2020	0.168	218	1.7	Non-Detect	4.08	1310	2160
GS-GSA-PZ-18	8/3/2020	0.0671(J)	106	4.55	Non-Detect	4.09	729	1210
GS-GSA-PZ-19	8/3/2020	0.0553(J)	88	21.7	0.18	6.32	210	740
GS-GSA-PZ-20	8/3/2020	0.0833(J)	76.9	15	0.188	6.03	379	798
GS-GSA-PZ-21	8/4/2020	Non-Detect	36.4	13.6	0.323	6.94	23.8	447
GS-GSA-PZ-22	8/4/2020	0.108	70.4	7.77	0.167	6.42	340	638

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

Table 7.
First Semi-Annual Monitoring Event Analytical Summary

					APPENDIX IV			
WELL	SAMPLE DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt
UNITS		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-1	8/3/2020	Non-Detect	Non-Detect	0.0107	Non-Detect	0.00237	Non-Detect	0.0722
MW-2	8/3/2020	Non-Detect	Non-Detect	0.0147	Non-Detect	Non-Detect	Non-Detect	0.0589
MW-3	8/3/2020	Non-Detect	0.00426(J)	0.0166	0.00405	0.00652	Non-Detect	0.64
MW-4	8/5/2020	Non-Detect	Non-Detect	0.0125	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	8/4/2020	Non-Detect	Non-Detect	0.0139	0.00174(J)	Non-Detect	Non-Detect	0.0862
GS-GSA-MW-4	8/5/2020	Non-Detect	0.00115(J)	0.0142	0.00385	0.00157	Non-Detect	0.235
GS-GSA-MW-8	8/5/2020	Non-Detect	Non-Detect	0.0216	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3V	8/4/2020	Non-Detect	Non-Detect	0.017	Non-Detect	Non-Detect	Non-Detect	0.0133
GS-GSA-MW-4V	8/5/2020	Non-Detect	0.00116(J)	0.0112	0.00416	Non-Detect	Non-Detect	0.141
GS-GSA-MW-8V	8/5/2020	Non-Detect	0.00476(J)	0.125	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-9H	8/4/2020	Non-Detect	0.00137(J)	0.0153	0.000882(J)	0.000308(J)	Non-Detect	0.178
GS-GSA-MW-9V	8/4/2020	Non-Detect	Non-Detect	0.0155	Non-Detect	Non-Detect	Non-Detect	0.00412(J)
GS-GSA-MW-11H	8/4/2020	Non-Detect	Non-Detect	0.0138	Non-Detect	Non-Detect	Non-Detect	0.0061
GS-GSA-MW-12H	8/5/2020	Non-Detect	0.00158(J)	0.016	0.00747	0.00393	Non-Detect	0.436
GS-GSA-MW-12V	8/5/2020	Non-Detect	Non-Detect	0.0157	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-13H	8/4/2020	Non-Detect	0.103	0.0275	Non-Detect	Non-Detect	Non-Detect	0.111
GS-GSA-MW-14H	8/5/2020	Non-Detect	0.00181(J)	0.0113	0.00879	0.0018	Non-Detect	0.237
GS-GSA-PZ-17	8/4/2020	Non-Detect	0.00495(J)	0.0181	0.0145	0.00197	0.00254(J)	0.471
GS-GSA-PZ-18	8/3/2020	0.00113(J)	0.0114	0.0111	0.00829	0.0012	0.00315(J)	0.156
GS-GSA-PZ-19	8/3/2020	Non-Detect	0.00279(J)	0.047	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-PZ-20	8/3/2020	Non-Detect	0.00214(J)	0.0211	Non-Detect	Non-Detect	Non-Detect	0.00734
GS-GSA-PZ-21	8/4/2020	Non-Detect	0.00204(J)	0.12	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-PZ-22	8/4/2020	Non-Detect	0.0297	0.0243	Non-Detect	Non-Detect	Non-Detect	0.0021(J)

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

Table 7.
First Semi-Annual Monitoring Event Analytical Summary

					APPEN	DIX IV			
WELL	SAMPLE DATE	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS	S	pCi/L	mg/L						
MW-1	8/3/2020	-0.127(U)	Non-Detect	Non-Detect	0.0259	Non-Detect	Non-Detect	0.00278(J)	Non-Detect
MW-2	8/3/2020	0.888(U)	0.122	Non-Detect	0.0611	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-3	8/3/2020	0.765(U)	0.0766(J)	0.002(J)	0.27	Non-Detect	Non-Detect	0.0146	Non-Detect
MW-4	8/5/2020	0.565(U)	0.359	Non-Detect	0.0519	Non-Detect	Non-Detect	0.00232(J)	Non-Detect
GS-GSA-MW-3	8/4/2020	0.45(U)	0.389	Non-Detect	0.468	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4	8/5/2020	0.389(U)	Non-Detect	Non-Detect	0.273	Non-Detect	Non-Detect	0.00298(J)	0.000205(J)
GS-GSA-MW-8	8/5/2020	-0.115(U)	0.119	Non-Detect	0.206	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3V	8/4/2020	-0.00668(U)	0.349	Non-Detect	0.395	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4V	8/5/2020	0.533(U)	0.363	Non-Detect	0.322	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8V	8/5/2020	1.85	0.256	Non-Detect	0.275	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-9H	8/4/2020	-0.385(U)	0.127	Non-Detect	0.166	Non-Detect	Non-Detect	Non-Detect	0.000265(J)
GS-GSA-MW-9V	8/4/2020	0.837(U)	0.135	Non-Detect	0.364	Non-Detect	0.00423(J)	Non-Detect	Non-Detect
GS-GSA-MW-11H	8/4/2020	0.0315(U)	0.109	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-12H	8/5/2020	-0.306(U)	Non-Detect	0.00329(J)	0.441	Non-Detect	Non-Detect	0.00417(J)	0.000297(J)
GS-GSA-MW-12V	8/5/2020	-0.284(U)	0.217	Non-Detect	0.334	Non-Detect	0.00247(J)	Non-Detect	Non-Detect
GS-GSA-MW-13H	8/4/2020	-0.402(U)	0.113	Non-Detect	0.0534	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-14H	8/5/2020	0.758(U)	0.082(J)	0.00122(J)	0.512	Non-Detect	Non-Detect	0.00571(J)	Non-Detect
GS-GSA-PZ-17	8/4/2020	0.407(U)	Non-Detect	0.00582	1.39	Non-Detect	Non-Detect	0.0135	0.000242(J)
GS-GSA-PZ-18	8/3/2020	0.511(U)	Non-Detect	0.00366(J)	0.422	Non-Detect	Non-Detect	0.00616(J)	Non-Detect
GS-GSA-PZ-19	8/3/2020	0.652(U)	0.18	Non-Detect	0.0753	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-PZ-20	8/3/2020	0.0893(U)	0.188	Non-Detect	0.102	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-PZ-21	8/4/2020	0.839	0.323	Non-Detect	0.0182(J)	Non-Detect	0.00347(J)	Non-Detect	Non-Detect
GS-GSA-PZ-22	8/4/2020	0.114(U)	0.167	Non-Detect	0.0558	Non-Detect	0.00267(J)	Non-Detect	Non-Detect

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- 3. U Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration),
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- 4. TDS Total Dissolved Solids

Appendix A

Appendix A Abbreviations

Abbreviations:

- 1. mg/L Milligrams per liter
- 2. pCi/L Picocuries per liter
- 3. N/A indicates the constituent was not analyzed during the sampling event.
- 4. J value indicates the result is greater that or equal to the Method Detection Limit (MDL) and less that the Practical Quantitation Limit (PQL).

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

- 5. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
- 6. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
- 7. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

					APPENDIX II											APPENDIX I	V						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	ned Radium 22	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
U	NITS	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
MW-1	4/26/2016	0.0231(J)	147	1.94	0.146(J)	5.2	1490	2080	Non-Detect	Non-Detect	0.00941(J)	Non-Detect	0.00196	Non-Detect	0.0343	n/a	0.146(J)	Non-Detect	0.0264(J)	Non-Detect	Non-Detect	0.00261(J)	Non-Detect
MW-1	6/20/2016	0.0227(J)	152	2.09	0.148(J)	5.18	1420	2060	Non-Detect	Non-Detect	0.00951(J)	Non-Detect	0.0021	Non-Detect	0.0413	n/a	0.148(J)	Non-Detect	0.0246(J)	Non-Detect	Non-Detect	0.00242(J)	Non-Detect
MW-1	8/8/2016	0.0278(J)	150	2.18	0.137(J)	5.12	1460	2070	Non-Detect	Non-Detect	0.00991(J)	Non-Detect	0.00206	Non-Detect	0.0513	n/a	0.137(J)	Non-Detect	0.0229(J)	Non-Detect	Non-Detect	0.00253(J)	Non-Detect
MW-1	8/24/2016	0.0247(J)	142	2.22	0.133(J)	n/a	1450	2040	Non-Detect	Non-Detect	0.00949(J)	Non-Detect	0.00182	Non-Detect	0.0471	0.566(U)	0.133(J)	Non-Detect	0.0236(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-1	10/3/2016	0.0307(J)	139	2.34	0.103(J)	5.21	1460	2110	Non-Detect	Non-Detect	0.0105	Non-Detect	0.00188	Non-Detect	0.0525	0.537(U)	0.103(J)	Non-Detect	0.0229(J)	Non-Detect	Non-Detect	0.00211(J)	Non-Detect
MW-1	10/26/2016	0.0241(J)	133	2.34	0.05(J)	5.2	1330	2000	Non-Detect	Non-Detect	0.00931(J)	Non-Detect	0.00175	Non-Detect	0.0527	0.636	0.05(J)	Non-Detect	0.0227(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-1	11/21/2016	0.0202(J)	144	2.5	0.047(J)	5.19	1420	2070	Non-Detect	Non-Detect	0.00879(J)	Non-Detect	0.00197	Non-Detect	0.0569	0.807	0.047(J)	Non-Detect	0.0236(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-1	11/21/2016	n/a	n/a	n/a	n/a	5.19	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	n/a	n/a	n/a
MW-1	1/17/2017	0.0201(J)	131	2.68	0.09(J)	5.17	1350	1930	Non-Detect	Non-Detect	0.00929(J)	Non-Detect	0.002	Non-Detect	0.0768	0.308(U)	0.09(J)	Non-Detect	0.0228(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-1	3/22/2017	0.0224(J)	141	3.7	0.12	5.2	1500	2060	Non-Detect	Non-Detect	0.00938(J)	Non-Detect	0.0019	Non-Detect	0.0535	0.344(U)	0.12	Non-Detect	0.0238(J)	Non-Detect	Non-Detect	0.0022(J)	Non-Detect
MW-1	4/18/2017	Non-Detect	149	2.4	0.12	5.2	1300	2140	Non-Detect	Non-Detect	0.00964(J)	Non-Detect	0.00159	Non-Detect	0.0442	0.934	0.12	Non-Detect	0.0242(J)	Non-Detect	Non-Detect	0.0027(J)	Non-Detect
MW-1	5/30/2017	Non-Detect	140	2.6	0.13	5.14	1400	2240	Non-Detect	Non-Detect	0.00982(J)	Non-Detect	0.00214	Non-Detect	0.0465	0.149(U)	0.13	Non-Detect	0.0229(J)	Non-Detect	Non-Detect	0.00316(J)	Non-Detect
MW-1	8/23/2017	0.0253(J)	152	2.7	0.16	5.12	1500	2160	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.16	n/a	n/a	n/a	n/a	n/a	n/a
MW-1	2/13/2018	n/a	n/a	n/a	0.14	5.18	n/a	n/a	Non-Detect	Non-Detect	0.00937(J)	Non-Detect	0.0018	Non-Detect	0.062	0.774	0.14	Non-Detect	0.0233(J)	Non-Detect	Non-Detect	0.00211(J)	Non-Detect
MW-1	5/22/2018	0.0224(J)	166	2.3	0.16	5.2	2100	2380	Non-Detect	Non-Detect	0.0102	Non-Detect	0.00201	Non-Detect	0.0443	-0.091(U)	0.16	Non-Detect	0.0263(J)	Non-Detect	Non-Detect	0.00372(J)	Non-Detect
MW-1	6/12/2018	0.0214(J)	203	2.3	0.16	5.15	1500	2400	Non-Detect	Non-Detect	0.0104	Non-Detect	0.00217	Non-Detect	0.0512	1.18	0.16	Non-Detect	0.0251(J)	Non-Detect	Non-Detect	0.00409(J)	Non-Detect
MW-1	10/17/2018	0.0216(J)	171	1.7(J)	0.18	5.12	1400	2220	Non-Detect	Non-Detect	0.00952(J)	Non-Detect	0.00228	Non-Detect	0.0751	0.553(U)	0.18	Non-Detect	0.025(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-1	11/19/2018	0.0237(J)	154	1.7(J)	0.15	5.09	1300	2360	Non-Detect	Non-Detect	0.00915(J)	Non-Detect	0.00156	Non-Detect	0.0825	0.862	0.15	Non-Detect	0.0241	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-1	4/10/2019	0.0304(J)	243	2.36	0.102	5.11	1700	2630	0.00143(J)	Non-Detect	0.0105	Non-Detect	0.00224	Non-Detect	0.0445	0.342(U)	0.102	Non-Detect	0.0285	Non-Detect	Non-Detect	0.00471(J)	Non-Detect
MW-1	5/14/2019	Non-Detect	167	2.28	0.119	5.19	1560	2340	0.00137(J)	Non-Detect	0.00913(J)	Non-Detect	0.00238	Non-Detect	0.0485	0.509	0.119	Non-Detect	0.026(J)	Non-Detect	Non-Detect	0.00316(J)	Non-Detect
MW-1	10/8/2019	Non-Detect	157	2.31	0.0924(J)	5.12	1540	2330	Non-Detect	Non-Detect	0.0109	Non-Detect	0.00218	Non-Detect	0.0778	1.47	0.0924(J)	Non-Detect	0.0268	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-1	10/16/2019	0.0385(J)	157	2.42	0.0756(J)	5.16	1680	3650	Non-Detect	Non-Detect	0.0106	Non-Detect	0.00225	Non-Detect	0.08	0.204(U)	0.0756(J)	Non-Detect	0.0263	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-1	2/3/2020	Non-Detect	172	2.07	0.0982(J)	5	1510	2380	Non-Detect	Non-Detect	0.00995(J)	Non-Detect	0.00182	Non-Detect	0.0495	0.521(U)	0.0982(J)	Non-Detect	0.0292	Non-Detect	Non-Detect	0.00272(J)	Non-Detect
MW-1	8/3/2020	Non-Detect	148	2.05	Non-Detect	5.08	1370	2200	Non-Detect	Non-Detect	0.0107	Non-Detect	0.00237	Non-Detect	0.0722	-0.127(U)	Non-Detect	Non-Detect	0.0259	Non-Detect	Non-Detect	0.00278(J)	Non-Detect

				A	APPENDIX II											APPENDIX IV	V						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	ned Radium 22	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
U	NITS	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
MW-2	4/25/2016	0.0241(J)	123	1.9	0.149(J)	5.94	745	1260	Non-Detect	Non-Detect	0.0134	Non-Detect	Non-Detect	Non-Detect	0.0487	n/a	0.149(J)	Non-Detect	0.0353(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	6/20/2016	0.0284(J)	168	3.43	0.148(J)	5.96	964	1620	Non-Detect	Non-Detect	0.0165	Non-Detect	Non-Detect	Non-Detect	0.0767	n/a	0.148(J)	Non-Detect	0.0583	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	8/8/2016	0.034(J)	180	3.31	0.134(J)	5.88	1100	1740	Non-Detect	Non-Detect	0.0162	Non-Detect	Non-Detect	Non-Detect	0.103	n/a	0.134(J)	Non-Detect	0.0627	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	8/24/2016	0.0316(J)	180	3.23	0.129(J)	n/a	1130	1720	Non-Detect	Non-Detect	0.0139	Non-Detect	Non-Detect	Non-Detect	0.093	0.65	0.129(J)	Non-Detect	0.0651	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	10/3/2016	0.0367(J)	184	3.21	0.086(J)	5.91	1140	1800	Non-Detect	Non-Detect	0.0164	Non-Detect	Non-Detect	Non-Detect	0.0964	0.845	0.086(J)	Non-Detect	0.0622	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	10/26/2016	0.0331(J)	171	3.35	0.027(J)	5.84	1060	1800	Non-Detect	Non-Detect	0.0138	Non-Detect	Non-Detect	Non-Detect	0.0904	0.994	0.027(J)	Non-Detect	0.0293(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	11/21/2016	0.035(J)	179	3.34	0.027(J)	5.82	1100	1740	Non-Detect	0.00111(J)	0.0144	Non-Detect	Non-Detect	Non-Detect	0.0857	0.537(U)	0.027(J)	Non-Detect	0.0667	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	1/17/2017	0.0259(J)	188	3.58	0.066(J)	5.87	1160	1960	Non-Detect	Non-Detect	0.0135	Non-Detect	0.000311(J)	Non-Detect	0.0745	-0.0159(U)	0.066(J)	Non-Detect	0.0636	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	3/22/2017	0.0243(J)	155	3.4	0.13	6.01	900	1510	Non-Detect	Non-Detect	0.0132	Non-Detect	Non-Detect	Non-Detect	0.0328	0.279(U)	0.13	Non-Detect	0.0464(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	4/18/2017	0.0206(J)	156	2.6	0.16	6.02	870	1580	Non-Detect	Non-Detect	0.012	Non-Detect	Non-Detect	Non-Detect	0.0242	0.32(U)	0.16	Non-Detect	0.0446(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	5/31/2017	0.0234(J)	151	4.4	0.13	5.85	1100	1730	Non-Detect	Non-Detect	0.0126	Non-Detect	0.000212(J)	Non-Detect	0.0441	0.178(U)	0.13	Non-Detect	0.0496(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	8/23/2017	0.0267(J)	155	4.4	0.16	5.89	920	1550	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.16	n/a	n/a	n/a	n/a	n/a	n/a
MW-2	2/13/2018	n/a	n/a	n/a	0.22	6.21	n/a	n/a	Non-Detect	Non-Detect	0.0127	Non-Detect	Non-Detect	Non-Detect	0.0179	0.804	0.22	Non-Detect	0.0615	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	5/22/2018	0.0251(J)	172	3.2	0.17	6.04	1200	1500	Non-Detect	Non-Detect	0.0131	Non-Detect	Non-Detect	Non-Detect	0.028	0.0077(U)	0.17	Non-Detect	0.0465(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	6/12/2018	0.0275(J)	179	3.7	0.16	5.95	860	1550	Non-Detect	Non-Detect	0.0138	Non-Detect	Non-Detect	Non-Detect	0.0366	-0.315(U)	0.16	Non-Detect	0.0472(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	10/17/2018	0.0321(J)	200	4.6	0.16	5.9	970	1740	Non-Detect	Non-Detect	0.0137	Non-Detect	Non-Detect	Non-Detect	0.0745	0.574(U)	0.16	Non-Detect	0.0633	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	11/19/2018	0.0324(J)	221	3	0.18	6.03	1000	1990	Non-Detect	Non-Detect	0.0115	Non-Detect	Non-Detect	Non-Detect	0.0225	0.654	0.18	Non-Detect	0.0584	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	4/10/2019	Non-Detect	200	1.76	0.262	6.1	889	1250	0.000993(J)	Non-Detect	0.0111	Non-Detect	Non-Detect	Non-Detect	0.0152	0.329(U)	0.262	Non-Detect	0.0574	Non-Detect	Non-Detect	0.00322(J)	Non-Detect
MW-2	5/14/2019	Non-Detect	168	2.98	0.170	6.07	948	1480	0.000989(J)	Non-Detect	0.0109	Non-Detect	Non-Detect	Non-Detect	0.0222	0.579	0.170	Non-Detect	0.0445	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	10/8/2019	0.0371(J)	190	4.26	0.164	5.96	1230	1840	Non-Detect	Non-Detect	0.0151	Non-Detect	Non-Detect	Non-Detect	0.0674	0.493(U)	0.164	Non-Detect	0.0677	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	10/16/2019	0.0419(J)	194	4.04	0.114	5.98	1170	1830	Non-Detect	Non-Detect	0.0146	Non-Detect	Non-Detect	Non-Detect	0.073	0.046(U)	0.114	Non-Detect	0.0661	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	2/3/2020	Non-Detect	172	2.48	0.182	5.95	803	1440	Non-Detect	Non-Detect	0.0122	Non-Detect	Non-Detect	Non-Detect	0.0193	-0.0245(U)	0.182	Non-Detect	0.0534	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-2	8/3/2020	0.0317(J)	172	4.03	0.122	5.95	907	1650	Non-Detect	Non-Detect	0.0147	Non-Detect	Non-Detect	Non-Detect	0.0589	0.888(U)	0.122	Non-Detect	0.0611	Non-Detect	Non-Detect	Non-Detect	Non-Detect

				A	APPENDIX II										A	APPENDIX I	V						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	ned Radium 22	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
	UNITS	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-3	4/25/2016	0.028(J)	224	1.32	0.243(J)	5.56	1890	2720	Non-Detect	Non-Detect	0.00803(J)	0.00122(J)	0.0121	0.00373(J)	0.232	n/a	0.243(J)	Non-Detect	0.0964	Non-Detect	Non-Detect	Non-Detect	0.000205(J)
MW-3	6/22/2016	0.0433(J)	266	1.46	0.269(J)	5.57	2100	3250	Non-Detect	Non-Detect	0.0101	0.00144(J)	0.00163	0.00606(J)	0.332	n/a	0.269(J)	Non-Detect	0.156	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-3	8/9/2016	0.0429(J)	260	1.35	0.363	5.67	2050	3050	Non-Detect	Non-Detect	0.00889(J)	0.00331	0.00122	Non-Detect	0.311	n/a	0.363	Non-Detect	0.122	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-3	8/24/2016	0.0431(J)	274	1.47	0.346	5.63	2190	3080	Non-Detect	Non-Detect	0.00962(J)	0.00308	Non-Detect	Non-Detect	0.271	0.131(U)	0.346	Non-Detect	0.138	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-3	10/4/2016	0.04(J)	243	1.59	0.266(J)	5.69	1950	2900	Non-Detect	Non-Detect	0.00984(J)	0.00129(J)	0.000689(J)	Non-Detect	0.148	0.514(U)	0.266(J)	Non-Detect	0.0966	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-3	10/26/2016	0.0375(J)	254	1.27	0.266(J)	5.56	1980	2940	Non-Detect	Non-Detect	0.00878(J)	0.0071	0.00136	Non-Detect	0.236	0.755	0.266(J)	Non-Detect	0.134	Non-Detect	Non-Detect	Non-Detect	0.000209(J)
MW-3	11/21/2016	0.0406(J)	263	1.38	0.244(J)	5.42	2060	3090	Non-Detect	Non-Detect	0.00833(J)	0.00689	0.00171	Non-Detect	0.241	0.7	0.244(J)	Non-Detect	0.167	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-3	1/18/2017	0.0548(J)	431	1.34	0.385	5.11	2620	4020	Non-Detect	Non-Detect	0.00966(J)	0.0169	0.003	Non-Detect	0.347	0.606	0.385	Non-Detect	0.237	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-3	3/22/2017	0.0344(J)	318	2	0.41	4.52	3200	4180	Non-Detect	0.00122(J)	0.00991(J)	0.00686	0.00473	0.00945(J)	0.271	0.927	0.41	Non-Detect	0.203	Non-Detect	Non-Detect	0.0141	Non-Detect
MW-3	4/18/2017	Non-Detect	296	2.2	0.29	5.84	2500	4440	Non-Detect	Non-Detect	0.00976(J)	Non-Detect	0.00117	0.0105	0.00324(J)	0.334(U)	0.29	Non-Detect	0.0764	Non-Detect	Non-Detect	0.0158	Non-Detect
MW-3	5/31/2017	0.0454(J)	306	1.5(J)	0.37	4.56	2800	3970	Non-Detect	Non-Detect	0.00866(J)	0.00547	0.00296	Non-Detect	0.225	0.8	0.37	Non-Detect	0.218	Non-Detect	Non-Detect	0.00632(J)	Non-Detect
MW-3	8/23/2017	0.0425(J)	298	1.8(J)	0.55	4.77	2600	4050	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.55	n/a	n/a	n/a	n/a	n/a	n/a
MW-3	2/13/2018	n/a	n/a	n/a	0.27	5.67	n/a	n/a	Non-Detect	Non-Detect	0.00821(J)	Non-Detect	0.00232	Non-Detect	0.00661(J)	0.649	0.27	Non-Detect	0.0964	Non-Detect	Non-Detect	0.0209	Non-Detect
MW-3	5/24/2018	0.0339(J)	297	1.6(J)	0.6	5.19	2700	3680		Non-Detect		0.00164(J)	0.00459	Non-Detect	0.158	0.448(U)	0.6	Non-Detect	0.145	Non-Detect	Non-Detect	0.00918(J)	
MW-3	6/12/2018	0.0371(J)	318	1.4(J)	0.53	4.79	2500	3820				0.00306	0.00351	Non-Detect	0.291	0.234(U)	0.53	Non-Detect	0.194		Non-Detect		
MW-3	10/17/2018	0.0596(J)	392	Non-Detect	0.63	4.75	2700	4730	Non-Detect	0.00133(J)	0.0126	0.0121	0.00393	Non-Detect	0.49	0.852	0.63	0.00102(J)	0.384		Non-Detect		
MW-3	11/19/2018	0.0514(J)	387	Non-Detect	0.31	3.77	3000	4710	Non-Detect	0.0012(J)	0.0109	0.0185	0.00309	Non-Detect	0.386	0.521	0.31	0.00692	0.323		Non-Detect		
MW-3	4/10/2019	Non-Detect	348	2.25	0.273	5.54	2460	3680	0.000978(J)			Non-Detect	0.00337	Non-Detect	0.0144	0.198(U)	0.273	Non-Detect	0.0905		Non-Detect		Non-Detect
MW-3				2.28	0.273	5.71	2460											Non-Detect					
		Non-Detect							Non-Detect														
MW-3	10/8/2019	0.0537(J)	371	1.36	0.225	4.98	2950	4720	Non-Detect	0.0048(J)	0.0154	0.0084	0.00598	Non-Detect	1.07	0.833(U)	0.225	Non-Detect	0.419		Non-Detect		
MW-3	10/16/2019	0.05(J)	346	1.4	0.106	4.51	2820	4210	Non-Detect		0.0128	0.0103	0.00448	Non-Detect	0.848	0.0279(U)	0.106	0.00108(J)	0.337		Non-Detect		
MW-3	2/3/2020	Non-Detect	276	2.12	0.256	5.54	2290	3530	Non-Detect	Non-Detect	0.0086(J)	Non-Detect		Non-Detect	0.0114	0.0246(U)	0.256	Non-Detect	0.0825		Non-Detect		Non-Detect
MW-3	8/3/2020	0.0424(J)	285	1.17	0.0766(J)	5.06	2330	3760	Non-Detect	0.00426(J)	0.0166	0.00405	0.00652	Non-Detect	0.64	0.765(U)	0.0766(J)	0.002(J)	0.27	Non-Detect	Non-Detect	0.0146	Non-Detect

				A	PPENDIX II										A	APPENDIX I	V						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	ned Radium 22	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
1	JNITS	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
MW-4	4/25/2016	0.0414(J)	261	1.53	0.372	6.22	2260	3300	Non-Detect	Non-Detect	0.0114	Non-Detect	Non-Detect	Non-Detect	Non-Detect	n/a	0.372	Non-Detect	0.0528	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	6/20/2016	0.0434(J)	295	1.85	0.361	6.21	2500	3870	Non-Detect	Non-Detect	0.0103	Non-Detect	Non-Detect	Non-Detect	Non-Detect	n/a	0.361	Non-Detect	0.0554	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	8/9/2016	0.0453(J)	318	1.95	0.326	6.11	2750	4140	Non-Detect	Non-Detect	0.0119	Non-Detect	Non-Detect	Non-Detect	Non-Detect	n/a	0.326	Non-Detect	0.0452(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	8/24/2016	0.0451(J)	319	2.07	0.329	6.11	2770	4190	Non-Detect	Non-Detect	0.0118	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.266(U)	0.329	Non-Detect	0.0488(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	10/3/2016	0.0511(J)	293	2.02	0.287(J)	6.13	3060	4190	Non-Detect	Non-Detect	0.0119	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.59(U)	0.287(J)	Non-Detect	0.0476(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	10/26/2016	0.0507(J)	311	2.07	0.194(J)	6.12	2650	4400	Non-Detect	Non-Detect	0.0104	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.164(U)	0.194(J)	Non-Detect	0.049(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	11/21/2016	0.0458(J)	320	2.39	0.192(J)	6.09	2720	4230	Non-Detect	Non-Detect	0.0106	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.296(U)	0.192(J)	Non-Detect	0.0477(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	1/18/2017	0.0445(J)	417	1.9	0.223(J)	6.09	2650	4120	Non-Detect	Non-Detect	0.0101	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0267(U)	0.223(J)	Non-Detect	0.045(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	3/22/2017	0.0432(J)	292	1.5(J)	0.32	6.15	2700	3980	Non-Detect	Non-Detect	0.0103	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.132(U)	0.32	Non-Detect	0.0493(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	4/18/2017	0.0409(J)	302	1.6(J)	0.32	6.19	2400	3880	Non-Detect	Non-Detect	0.0107	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.0439(U)	0.32	Non-Detect	0.0494(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	5/31/2017	0.0392(J)	284	2.1	0.31	6.13	2700	4210		Non-Detect		Non-Detect		Non-Detect		0.3(U)	0.31	Non-Detect	0.0501		Non-Detect		
MW-4	8/23/2017	0.042(J)	297	2.3	0.38	6.12	2700	3990	n/a	0.38	n/a	n/a	n/a	n/a	n/a	n/a							
MW-4	2/13/2018	n/a	n/a	n/a	0.38	6.22	n/a	n/a	Non-Detect			Non-Detect		Non-Detect		0.69	0.38	Non-Detect	0.0446(J)		Non-Detect		Non-Detect
MW-4	5/23/2018	0.0433(J)	296	2	0.38	6.21	2400	3740				Non-Detect			Non-Detect		0.38	Non-Detect	0.0513		Non-Detect		
				1 7(T)	0.39																		
MW-4	6/12/2018	0.0478(J)	355	1.7(J)		6.16	2600	4080		Non-Detect		Non-Detect			Non-Detect		0.39	Non-Detect	0.0511		Non-Detect		
MW-4	10/17/2018	0.0468(J)	342	1.5(J)	0.39	6.12	2600	4250		Non-Detect		Non-Detect			Non-Detect		0.39	Non-Detect	0.0532		Non-Detect		
MW-4	11/19/2018	0.0526(J)	289	Non-Detect	0.36	6.16	2400	3920		Non-Detect		Non-Detect			Non-Detect	0.794	0.36	Non-Detect	0.0467		Non-Detect		Non-Detect
MW-4	4/10/2019	0.0438(J)	356	1.88	0.384	6.14	2090	3280	0.00097(J)	Non-Detect	0.0107	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.515	0.384	Non-Detect	0.0504	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	5/14/2019	Non-Detect	254	1.82	0.335	6.23	2240	3130	Non-Detect	Non-Detect	0.00949(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.352(U)	0.335	Non-Detect	0.0485	Non-Detect	Non-Detect	0.00201(J)	Non-Detect
MW-4	10/10/2019	0.0487(J)	302	1.93	0.304	6.15	2690	4000	Non-Detect	Non-Detect	0.0116	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.02(U)	0.304	Non-Detect	0.054	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	10/16/2019	0.0505(J)	356	1.92	0.302	6.19	3050	4060	Non-Detect	Non-Detect	0.0125	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.356(U)	0.302	Non-Detect	0.052	Non-Detect	Non-Detect	Non-Detect	Non-Detect
MW-4	2/3/2020	0.0433(J)	265	1.72	0.37	6.14	1920	3240	Non-Detect	Non-Detect	0.0103	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.254(U)	0.37	Non-Detect	0.0556	Non-Detect	Non-Detect	0.00212(J)	Non-Detect
MW-4	8/5/2020	0.0459(J)	281	1.57	0.359	6.15	1930	3200	Non-Detect	Non-Detect	0.0125	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.565(U)	0.359	Non-Detect	0.0519	Non-Detect	Non-Detect	0.00232(J)	Non-Detect

				A	APPENDIX II	I										APPENDIX IV	-						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	ned Radium 22	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNI	ITS	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-GSA-MW-3	8/24/2016	0.799	539	204	0.264(J)	6.28	2910	5020	Non-Detect	Non-Detect	0.0155	Non-Detect	Non-Detect	Non-Detect	0.0303	0.389(U)	0.264(J)	Non-Detect	0.362	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	10/3/2016	0.889	519.7	220	0.276(J)	6.28	2980	4880	Non-Detect	Non-Detect	0.0156	Non-Detect	Non-Detect	Non-Detect	0.041	0.683	0.276(J)	Non-Detect	0.371	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	10/26/2016	1.23	916	249	0.182(J)	6.19	2790	5020	Non-Detect	Non-Detect	0.0122	0.000922(J)	Non-Detect	Non-Detect	0.0505	0.242(U)	0.182(J)	Non-Detect	0.416	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	11/21/2016	1.72	552	256	0.238(J)	6.2	2880	5090	Non-Detect	Non-Detect	0.0128	0.00133(J)	Non-Detect	Non-Detect	0.0617	0.764	0.238(J)	Non-Detect	0.401	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	1/17/2017	2.63	572	301	0.34	6.13	2950	4330	Non-Detect	Non-Detect	0.0125	0.0017(J)	Non-Detect	Non-Detect	0.0793	0.191(U)	0.34	Non-Detect	0.497	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	3/20/2017	3.11	817	320	0.39	6.17	2800	2690	Non-Detect	Non-Detect	0.0124	0.00191(J)	Non-Detect	Non-Detect	0.0726	-0.0158(U)	0.39	Non-Detect	0.533	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	4/17/2017	4.51	476	340	0.57	5.6	2400	4780	Non-Detect	0.00405(J)	0.0149	0.00655	Non-Detect	Non-Detect	0.294	0.307(U)	0.57	Non-Detect	0.47	Non-Detect	Non-Detect	0.00521(J)	Non-Detect
GS-GSA-MW-3	5/30/2017	2.9	515	310	0.38	6.07	2900	5170	Non-Detect	Non-Detect	0.0121	0.00204(J)	Non-Detect	Non-Detect	0.0832	0.724	0.38	Non-Detect	0.479	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	8/24/2017	2.83	598	290	0.54	5.99	2900	5140	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.54	n/a	n/a	n/a	n/a	n/a	n/a
GS-GSA-MW-3	2/13/2018	n/a	n/a	n/a	0.57	5.88	n/a	n/a	Non-Detect	Non-Detect	0.0118	0.00387	Non-Detect	Non-Detect	0.124	0.633	0.57	Non-Detect	0.508	Non-Detect	Non-Detect	0.00267(J)	Non-Detect
GS-GSA-MW-3	6/11/2018	3.09	558	260	0.63	5.91	2900	4960	Non-Detect	Non-Detect	0.0127	0.00244(J)	Non-Detect	Non-Detect	0.138	0.773	0.63	Non-Detect	0.425	Non-Detect	Non-Detect	0.00236(J)	Non-Detect
GS-GSA-MW-3	10/17/2018	2.59	533	270	0.78	5.88	2800	4910	Non-Detect	Non-Detect	0.013	0.00345	Non-Detect	Non-Detect	0.138	0.668	0.78	Non-Detect	0.494	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	4/10/2019	3.35	659	249	0.738	5.83	2980	5090	0.00111(J)	0.00121(J)	0.0153	0.00257(J)	Non-Detect	Non-Detect	0.151	0.265(U)	0.738	Non-Detect	0.425	Non-Detect	Non-Detect	0.00234(J)	Non-Detect
GS-GSA-MW-3	10/14/2019	2.48	552	228	0.619	6.04	3110	5110	Non-Detect	Non-Detect	0.0122	0.00162(J)	Non-Detect	Non-Detect	0.102	0.297(U)	0.619	Non-Detect	0.459	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	2/3/2020	2.13	589	267	0.427	5.98	2840	4920	Non-Detect	Non-Detect	0.0141	0.00141(J)	Non-Detect	Non-Detect	0.0843	0.28(U)	0.427	Non-Detect	0.474	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3	8/4/2020	1.82	545	222	0.389	6.09	2820	5110	Non-Detect	Non-Detect	0.0139	0.00174(J)	Non-Detect	Non-Detect	0.0862	0.45(U)	0.389	Non-Detect	0.468	Non-Detect	Non-Detect	Non-Detect	Non-Detect

				A	APPENDIX III											APPENDIX IV	•						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	ned Radium 22	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UN]	ITS	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-GSA-MW-4	8/24/2016	4.88	102	112	0.793	3.83	567	992	Non-Detect	Non-Detect	0.0135	0.00576	0.00148	Non-Detect	0.151	0.741	0.793	Non-Detect	0.291	Non-Detect	Non-Detect	0.00234(J)	Non-Detect
GS-GSA-MW-4	10/3/2016	4.75	98.4	115	0.769	3.82	596	988	Non-Detect	Non-Detect	0.0127	0.00469	0.00147	Non-Detect	0.143	0.648	0.769	Non-Detect	0.287	Non-Detect	Non-Detect	0.00739(J)	Non-Detect
GS-GSA-MW-4	10/26/2016	4.96	88.7	115	0.578	3.81	585	1030	Non-Detect	Non-Detect	0.0118	0.00459	0.00157	Non-Detect	0.154	0.632	0.578	Non-Detect	0.298	Non-Detect	Non-Detect	0.00266(J)	Non-Detect
GS-GSA-MW-4	11/21/2016	4.82	104	117	0.562	3.81	593	1020	Non-Detect	Non-Detect	0.012	0.00502	0.00154	Non-Detect	0.155	1.57	0.562	Non-Detect	0.294	Non-Detect	Non-Detect	0.00212(J)	Non-Detect
GS-GSA-MW-4	1/17/2017	3.97	102	99.3	0.571	3.78	637	988	Non-Detect	Non-Detect	0.0119	0.00488	0.00131	Non-Detect	0.16	0.493	0.571	Non-Detect	0.27	Non-Detect	Non-Detect	0.00263(J)	Non-Detect
GS-GSA-MW-4	3/21/2017	3.39	94.7	79	0.54	3.76	530	990	Non-Detect	Non-Detect	0.0116	0.00521	0.00134	Non-Detect	0.158	0.604(U)	0.54	Non-Detect	0.258	Non-Detect	Non-Detect	0.00588(J)	Non-Detect
GS-GSA-MW-4	4/17/2017	3.46	97.9	85	0.54	3.76	530	884	Non-Detect	Non-Detect	0.0112	0.0058	0.00122	Non-Detect	0.159	0.252(U)	0.54	Non-Detect	0.274	Non-Detect	Non-Detect	0.00579(J)	Non-Detect
GS-GSA-MW-4	5/30/2017	3.79	93.9	99	0.49	3.76	530	1060	Non-Detect	Non-Detect	0.0117	0.00517	0.00167	Non-Detect	0.159	0.925	0.49	Non-Detect	0.285	Non-Detect	Non-Detect	0.00471(J)	Non-Detect
GS-GSA-MW-4	8/24/2017	4.19	105	110	0.7	3.7	530	1060	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.7	n/a	n/a	n/a	n/a	n/a	n/a
GS-GSA-MW-4	2/13/2018	n/a	n/a	n/a	0.63	3.73	n/a	n/a	Non-Detect	Non-Detect	0.0121	0.00544	0.00145	Non-Detect	0.19	0.382	0.63	Non-Detect	0.274	Non-Detect	Non-Detect	0.00498(J)	Non-Detect
GS-GSA-MW-4	6/11/2018	3.96	105	81	0.39	3.8	540	944	Non-Detect	Non-Detect	0.0139	0.00463	0.00171	Non-Detect	0.166	0.796	0.39	Non-Detect	0.266	Non-Detect	Non-Detect	0.00388(J)	Non-Detect
GS-GSA-MW-4	10/17/2018	3.98	117	85	0.44	3.81	520	928	Non-Detect	Non-Detect	0.0125	0.00369	0.00188	Non-Detect	0.154	0.922	0.44	Non-Detect	0.266	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4	4/10/2019	3.74	129	74.3	Non-Detect	3.83	616	1000	0.000976(J)	0.00176(J)	0.0136	0.00469	0.00176	Non-Detect	0.241	0.622	Non-Detect	Non-Detect	0.282	Non-Detect	Non-Detect	0.00322(J)	Non-Detect
GS-GSA-MW-4	10/14/2019	3.37	93.5	59.1	Non-Detect	3.91	641	967	Non-Detect	0.0012(J)	0.0147	0.00403	0.0015	Non-Detect	0.213	0.317(U)	Non-Detect	Non-Detect	0.262	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4	2/4/2020	2.74	116	43.2	Non-Detect	3.83	571	978	Non-Detect	0.00128(J)	0.0124	0.00415	0.00143	Non-Detect	0.217	0.324(U)	Non-Detect	Non-Detect	0.29	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4	8/5/2020	2.51	94.7	41	Non-Detect	3.86	519	938	Non-Detect	0.00115(J)	0.0142	0.00385	0.00157	Non-Detect	0.235	0.389(U)	Non-Detect	Non-Detect	0.273	Non-Detect	Non-Detect	0.00298(J)	0.000205(J)

				A	APPENDIX II	I										APPENDIX IV	7						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	ned Radium 22	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UN]	ITS	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-GSA-MW-8	8/24/2016	0.0898(J)	263	4.03	0.165(J)	6.78	1250	2280	Non-Detect	0.00119(J)	0.0536	Non-Detect	Non-Detect	Non-Detect	0.0201	0.558(U)	0.165(J)	Non-Detect	0.0683	Non-Detect	0.0031(J)	Non-Detect	Non-Detect
GS-GSA-MW-8	10/3/2016	0.0821(J)	253	3.87	0.114(J)	6.71	1270	2370	Non-Detect	0.00114(J)	0.0681	Non-Detect	Non-Detect	Non-Detect	0.0167	0.565	0.114(J)	Non-Detect	0.0661	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	10/26/2016	0.0889(J)	235	4.08	0.056(J)	6.65	1240	2350	Non-Detect	0.0011(J)	0.0562	Non-Detect	Non-Detect	Non-Detect	0.0253	0.555(U)	0.056(J)	Non-Detect	0.0681	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	11/21/2016	0.0788(J)	246	4.39	0.059(J)	6.7	1210	2530	Non-Detect	Non-Detect	0.0604	Non-Detect	Non-Detect	Non-Detect	0.0233	0.987	0.059(J)	Non-Detect	0.0682	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	1/17/2017	0.0607(J)	231	7.22	0.07(J)	6.25	1150	2380	Non-Detect	0.00103(J)	0.0402	Non-Detect	Non-Detect	Non-Detect	0.0708	0.476(U)	0.07(J)	Non-Detect	0.0516	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	3/20/2017	0.114	298	5.7	0.18	7.04	1400	2630	Non-Detect	Non-Detect	0.0305	Non-Detect	Non-Detect	Non-Detect	0.00277(J)	0.633(U)	0.18	Non-Detect	0.135	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	4/18/2017	0.108	317	4.7	0.17	6.99	1300	2700	Non-Detect	Non-Detect	0.0276	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.248(U)	0.17	Non-Detect	0.139	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	5/30/2017	0.105	316	15	0.16	6.98	1500	2980	Non-Detect	Non-Detect	0.0272	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.412(U)	0.16	Non-Detect	0.141	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	8/24/2017	0.12	391	93	0.18	6.89	1800	3390	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.18	n/a	n/a	n/a	n/a	n/a	n/a
GS-GSA-MW-8	2/13/2018	n/a	n/a	n/a	0.15	6.85	n/a	n/a	Non-Detect	Non-Detect	0.0249	Non-Detect	Non-Detect	Non-Detect	0.00492(J)	1.08	0.15	Non-Detect	0.163	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	6/12/2018	0.181	442	140	0.15	6.83	1800	3510	Non-Detect	Non-Detect	0.0234	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.446(U)	0.15	Non-Detect	0.166	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	10/17/2018	0.616	514	180	0.16	6.81	1600	3550	Non-Detect	Non-Detect	0.0236	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.05	0.16	Non-Detect	0.188	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	4/10/2019	0.944	533	174	0.156	6.71	2150	3580	0.00102(J)	Non-Detect	0.02	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.128(U)	0.156	Non-Detect	0.195	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	10/14/2019	2.11	524	207	0.118	6.88	2090	3730	Non-Detect	Non-Detect	0.0215	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.225(U)	0.118	Non-Detect	0.209	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	2/4/2020	1.47	461	94.1	0.132	6.85	1570	3190	Non-Detect	Non-Detect	0.0209	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.336(U)	0.132	Non-Detect	0.188	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8	8/5/2020	2.16	497	146	0.119	6.76	1880	3610	Non-Detect	Non-Detect	0.0216	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.115(U)	0.119	Non-Detect	0.206	Non-Detect	Non-Detect	Non-Detect	Non-Detect

				A	APPENDIX III											APPENDIX I	V						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pН	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	ned Radium 22	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNI	TS	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						
GS-GSA-MW-3V	3/5/2019	0.895	329	194	0.249	6.7	1170	2170	0.00179(J)	Non-Detect	0.0956	Non-Detect	Non-Detect	Non-Detect	0.0059	0.932	0.249	Non-Detect	0.309	Non-Detect	0.00347(J)	Non-Detect	Non-Detect
GS-GSA-MW-3V	10/14/2019	2.38	368	298	0.37	6.39	1710	3200	Non-Detect	Non-Detect	0.0451	Non-Detect	Non-Detect	Non-Detect	0.00845	0.184(U)	0.37	Non-Detect	0.38	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3V	2/3/2020	3.06	504	338	0.438	5.88	1970	3660	Non-Detect	Non-Detect	0.0215	Non-Detect	Non-Detect	Non-Detect	0.0135	0.408(U)	0.438	Non-Detect	0.46	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-3V	8/4/2020	2.8	443	305	0.349	5.9	1860	3530	Non-Detect	Non-Detect	0.017	Non-Detect	Non-Detect	Non-Detect	0.0133	-0.00668(U)	0.349	Non-Detect	0.395	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4V	3/5/2019	7.15	249	191	0.477	6.19	871	1410	Non-Detect	Non-Detect	0.0136	0.00155(J)	Non-Detect	Non-Detect	0.0836	0.364(U)	0.477	Non-Detect	0.369	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4V	10/14/2019	5.64	173	122	0.449	5.89	818	1340	Non-Detect	Non-Detect	0.0123	0.00382	Non-Detect	Non-Detect	0.12	0.369(U)	0.449	Non-Detect	0.317	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4V	2/3/2020	5.25	184	101	0.555	5.84	808	1290	Non-Detect	0.00101(J)	0.0103	0.00362	Non-Detect	Non-Detect	0.108	0.758	0.555	Non-Detect	0.332	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-4V	8/5/2020	4.41	167	80.9	0.363	5.81	761	1330	Non-Detect	0.00116(J)	0.0112	0.00416	Non-Detect	Non-Detect	0.141	0.533(U)	0.363	Non-Detect	0.322	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8V	2/5/2020	0.136	37.3	9.05	0.162	7.48	223	1100	Non-Detect	0.00232(J)	0.096	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.576	0.162	Non-Detect	0.327	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-8V	8/5/2020	0.131	31.9	13.9	0.256	7.58	243	1100	Non-Detect	0.00476(J)	0.125	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.85	0.256	Non-Detect	0.275	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-9H	3/5/2019	12.8	578	313	0.239	5.88	2010	3240	0.000852(J)	Non-Detect	0.0312	Non-Detect	0.000336(J)	Non-Detect	0.14	0.852	0.239	Non-Detect	0.169	Non-Detect	Non-Detect	Non-Detect	0.00021(J)
GS-GSA-MW-9H	10/16/2019	10.7	363	145	0.101	5.43	2020	3080	Non-Detect	0.0019(J)	0.0163	0.000985(J)	0.000362(J)	Non-Detect	0.168	1.29	0.101	Non-Detect	0.184	Non-Detect	Non-Detect	Non-Detect	0.000262(J)
GS-GSA-MW-9H	2/4/2020	9.63	413	139	0.205	5.34	1710	3110	Non-Detect	0.00123(J)	0.0148	0.000929(J)	0.000349(J)	Non-Detect	0.159	0.441(U)	0.205	Non-Detect	0.203	Non-Detect	Non-Detect	Non-Detect	0.000233(J)
GS-GSA-MW-9H	8/4/2020	8.53	346	109	0.127	5.33	1790	2920	Non-Detect	0.00137(J)	0.0153	0.000882(J)	0.000308(J)	Non-Detect	0.178	-0.385(U)	0.127	Non-Detect	0.166	Non-Detect	Non-Detect	Non-Detect	0.000265(J)
GS-GSA-MW-9V	8/4/2020	0.149	434	58.6	0.135	6.88	1700	3080	Non-Detect	Non-Detect	0.0155	Non-Detect	Non-Detect	Non-Detect	0.00412(J)	0.837(U)	0.135	Non-Detect	0.364	Non-Detect	0.00423(J)	Non-Detect	Non-Detect
GS-GSA-MW-11H	3/4/2019	0.0235(J)	177	3.81	0.101	6.04	785	1150	0.00149(J)	Non-Detect	0.0239	Non-Detect	Non-Detect	Non-Detect	0.0066	0.135(U)	0.101	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-11H	10/16/2019	0.0352(J)	143	4.45	0.0875(J)	6.07	750	1150	Non-Detect	Non-Detect	0.0192	Non-Detect	Non-Detect	Non-Detect	0.00598	0.189(U)	0.0875(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-11H	2/4/2020	Non-Detect	163	4.27	0.0743(J)	6.02	725	1200	Non-Detect	Non-Detect	0.0148	Non-Detect	Non-Detect	Non-Detect	0.00582	0.319(U)	0.0743(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-11H	8/4/2020	Non-Detect	139	4.51	0.109	5.74	694	1230	Non-Detect	Non-Detect	0.0138	Non-Detect	Non-Detect	Non-Detect	0.0061	0.0315(U)	0.109	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-12H	2/4/2020	0.0748(J)	158	2.34	Non-Detect	4.57	978	1580	Non-Detect	0.00157(J)	0.0141	0.00709	0.00301	Non-Detect	0.351	0.939	Non-Detect	0.00334(J)	0.394	Non-Detect	Non-Detect	Non-Detect	0.000491(J)
GS-GSA-MW-12H	8/5/2020	0.0748(J)	126	2	Non-Detect	4.13	811	1380	Non-Detect	0.00158(J)	0.016	0.00747	0.00393	Non-Detect	0.436	-0.306(U)	Non-Detect	0.00329(J)	0.441	Non-Detect	Non-Detect	0.00417(J)	0.000297(J)
GS-GSA-MW-12V	8/5/2020	1.55	350	159	0.217	6.15	1830	3330	Non-Detect	Non-Detect	0.0157	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.284(U)	0.217	Non-Detect	0.334	Non-Detect	0.00247(J)	Non-Detect	Non-Detect
GS-GSA-MW-13H	2/4/2020	0.202	171	12.9	0.115	6	720	1200	Non-Detect	0.16	0.0296	Non-Detect	Non-Detect	Non-Detect	0.0442	0.624	0.115	Non-Detect	0.0506	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-13H	8/4/2020	0.263	192	12.7	0.113	5.89	773	1350	Non-Detect	0.103	0.0275	Non-Detect	Non-Detect	Non-Detect	0.111	-0.402(U)	0.113	Non-Detect	0.0534	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-MW-14H	8/5/2020	0.158	141	3.28	0.082(J)	3.83	796	1280	Non-Detect	0.00181(J)	0.0113	0.00879	0.0018	Non-Detect	0.237	0.758(U)	0.082(J)	0.00122(J)	0.512	Non-Detect	Non-Detect	0.00571(J)	Non-Detect
GS-GSA-PZ-17	8/4/2020	0.168	218	1.7	Non-Detect	4.08	1310	2160	Non-Detect	0.00495(J)	0.0181	0.0145	0.00197	0.00254(J)	0.471	0.407(U)	Non-Detect	0.00582	1.39	Non-Detect	Non-Detect	0.0135	0.000242(J)
GS-GSA-PZ-18	8/3/2020	0.0671(J)	106	4.55	Non-Detect	4.09	729	1210	0.00113(J)	0.0114	0.0111	0.00829	0.0012	0.00315(J)	0.156	0.511(U)	Non-Detect	0.00366(J)	0.422	Non-Detect	Non-Detect	0.00616(J)	Non-Detect
GS-GSA-PZ-19	8/3/2020	0.0553(J)	88	21.7	0.18	6.32	210	740	Non-Detect	0.00279(J)	0.047	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.652(U)	0.18	Non-Detect	0.0753	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-PZ-20	8/3/2020	0.0833(J)	76.9	15	0.188	6.03	379	798	Non-Detect	0.00214(J)	0.0211	Non-Detect	Non-Detect	Non-Detect	0.00734	0.0893(U)	0.188	Non-Detect	0.102	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-GSA-PZ-21	8/4/2020	Non-Detect	36.4	13.6	0.323	6.94	23.8	447	Non-Detect	0.00204(J)	0.12	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.839	0.323	Non-Detect	0.0182(J)	Non-Detect	0.00347(J)	Non-Detect	Non-Detect
GS-GSA-PZ-22	8/4/2020	0.108	70.4	7.77	0.167	6.42	340	638	Non-Detect	0.0297	0.0243	Non-Detect	Non-Detect	Non-Detect	0.0021(J)	0.114(U)	0.167	Non-Detect	0.0558	Non-Detect	0.00267(J)	Non-Detect	Non-Detect

Appendix B

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

Field Case Narrative



Gorgas Gypsum Pond

2020 Compliance Event 1

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

The first pH field reading for upgradient well MW-3L was qualified due to the pH reading 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.

Analytical Report



Sample Group: WMWGORG_1257

Project/Site: Gorgas Gypsum

Parrish, AL 35580

For: Southern Company Services

3535 Colonnade Parkway Birmingham, AL 35243

Attention: Dustin Brooks & Greg Dyer

Released By: Laura Midkiff

lbmidkif@southernco.com

(205) 807-2676



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

February 25, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between February 04, 2020 and February 06, 2020. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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

Sincerely,

Quality Control:

Laura Midkiff

Digitality signed by Laura milusuii

DN: cn-Laura Midkiff, __a-Alabama Powei

Company, ou_Environmental Affairs,
email=lbmidkif@southernco.com, c=US

T. Durant Supervision:

Maske

2020.02.25 14:45:27 -06'00'





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



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



Metals ICP

Gorgas Gypsum

WMWGORG 1257

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA02286	665700	WMWGORG_1257
BA02287	665700	WMWGORG_1257
BA02288	665700	WMWGORG_1257
BA02289	665700	WMWGORG_1257
BA02290	665700	WMWGORG_1257
BA02291	665700	WMWGORG_1257
BA02543	665700	WMWGORG_1257
BA02544	665700	WMWGORG_1257
BA02545	665700	WMWGORG_1257
BA02546	665700	WMWGORG_1257
BA02547	665701	WMWGORG_1257
BA02548	665701	WMWGORG_1257
BA02549	665701	WMWGORG_1257
BA02550	665701	WMWGORG_1257
BA02551	665701	WMWGORG_1257
BA02552	665701	WMWGORG_1257
BA02553	665701	WMWGORG_1257
BA02554	665701	WMWGORG_1257
BA02555	665701	WMWGORG_1257

- 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.

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



- 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:
 - o BA02546 MS/MSD spike level for Calcium was 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. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	<u>Analyte</u>	Dilution Factor
BA02287	Calcium	20.3
BA02288	Calcium	20.3
BA02289	Calcium	20.3
BA02290	Calcium	20.3
BA02291	Calcium	20.3
BA02543	Calcium	20.3
BA02544	Calcium	20.3
BA02545	Calcium	20.3
BA02546	Calcium	20.3
BA02547	Calcium	20.3
BA02548	Calcium	20.3
BA02549	Calcium	20.3
BA02550	Calcium	20.3

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



BA02551	Calcium	20.3
BA02552	Calcium	20.3

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

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



Metals ICPMS

Gorgas Gypsum

WMWGORG 1257

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA02286	665810	WMWGORG_1257
BA02287	665810	WMWGORG_1257
BA02288	665810	WMWGORG_1257
BA02289	665810	WMWGORG_1257
BA02290	665810	WMWGORG_1257
BA02291	665810	WMWGORG_1257
BA02543	665810	WMWGORG_1257
BA02544	665810	WMWGORG_1257
BA02545	665810	WMWGORG_1257
BA02546	665810	WMWGORG_1257
BA02547	665811	WMWGORG_1257
BA02548	665811	WMWGORG_1257
BA02549	665811	WMWGORG_1257
BA02550	665811	WMWGORG_1257
BA02551	665811	WMWGORG_1257
BA02552	665811	WMWGORG_1257
BA02553	665811	WMWGORG_1257
BA02554	665811	WMWGORG_1257
BA02555	665811	WMWGORG_1257

- 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.

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



- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.
- 7. All samples were analyzed without a dilution factor.
- 8. The raw data results are shown with dilution factors included.

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



Mercury

Gorgas Gypsum

WMWGORG 1257

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA02286	665760	WMWGORG_1257
BA02287	665760	WMWGORG_1257
BA02288	665760	WMWGORG_1257
BA02289	665760	WMWGORG_1257
BA02290	665760	WMWGORG_1257
BA02291	665760	WMWGORG_1257
BA02543	665760	WMWGORG_1257
BA02544	665760	WMWGORG_1257
BA02545	665760	WMWGORG_1257
BA02546	665760	WMWGORG_1257
BA02547	665761	WMWGORG_1257
BA02548	665761	WMWGORG_1257
BA02549	665761	WMWGORG_1257
BA02550	665761	WMWGORG_1257
BA02551	665761	WMWGORG_1257
BA02552	665761	WMWGORG_1257
BA02553	665761	WMWGORG_1257
BA02554	665761	WMWGORG_1257
BA02555	665761	WMWGORG_1257

- 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.

Revision 4

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



- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.
- 7. All samples were analyzed without a dilution factor.
- 8. The raw data results are shown with dilution factors included.

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



TDS

Gorgas Gypsum

WMWGORG 1257

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA02286	665731	WMWGORG_1257
BA02287	665731	WMWGORG_1257
BA02288	665731	WMWGORG_1257
BA02289	665731	WMWGORG_1257
BA02290	665731	WMWGORG_1257
BA02291	665731	WMWGORG_1257
BA02543	665731	WMWGORG_1257
BA02544	665731	WMWGORG_1257
BA02545	665731	WMWGORG_1257
BA02546	665732	WMWGORG_1257
BA02547	665732	WMWGORG_1257
BA02548	665732	WMWGORG_1257
BA02549	665732	WMWGORG_1257
BA02550	665732	WMWGORG_1257
BA02551	665732	WMWGORG_1257
BA02552	665732	WMWGORG_1257
BA02553	665732	WMWGORG_1257
BA02554	665732	WMWGORG_1257
BA02555	665732	WMWGORG_1257

- 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.

Revision 4



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

- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
 - o BA02286
 - o BA02553
 - o BA02555

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



Anions

Gorgas Gypsum

WMWGORG 1257

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA02286	665580, 665584, 665643	WMWGORG_1257
BA02287	665580, 665584, 665643	WMWGORG_1257
BA02288	665580, 665584, 665643	WMWGORG_1257
BA02289	665580, 665584, 665643	WMWGORG_1257
BA02290	665580, 665584, 665643	WMWGORG_1257
BA02291	665580, 665584, 665643	WMWGORG_1257
BA02543	665736, 665738, 665646	WMWGORG_1257
BA02544	665736, 665738, 665646	WMWGORG_1257
BA02545	665736, 665738, 665646	WMWGORG_1257
BA02546	665736, 665738, 665646	WMWGORG_1257
BA02547	665736, 665738, 665646	WMWGORG_1257
BA02548	665736, 665738, 665646	WMWGORG_1257
BA02549	665736, 665738, 665646	WMWGORG_1257
BA02550	665736, 665738, 665646	WMWGORG_1257
BA02551	665736, 665738, 665646	WMWGORG_1257
BA02552	665736, 665738, 665646	WMWGORG_1257
BA02553	665737, 665739, 665647	WMWGORG_1257
BA02554	665737, 665739, 665647	WMWGORG_1257
BA02555	665737, 665739, 665647	WMWGORG_1257

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

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.

Revision 4

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



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

Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met.
- 7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	<u>Analyte</u>	Dilution Factor
BA02287	Sulfate	80
BA02288	Sulfate	80
BA02289	Sulfate	100
BA02290	Sulfate	100
BA02291	Sulfate	100
BA02543	Chloride & Sulfate	40 & 100
BA02544	Chloride & Sulfate	40 & 100
BA02545	Chloride & Sulfate	20 & 80
BA02546	Chloride & Sulfate	20 & 80
BA02547	Chloride & Sulfate	20 & 80
BA02548	Sulfate	80
BA02549	Sulfate	80
BA02550	Sulfate	80
BA02551	Chloride & Sulfate	40 & 100
BA02552	Chloride & Sulfate	40 & 100
BA02554	Sulfate	16

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

Certificate Of Analysis



Description: Gorgas Gypsum Field BlankLocation Code:WMWGORGFBCollected:2/3/20 12:18

Customer ID:

Submittal Date: 2/4/20 10:27

Laboratory ID Number: BA02286

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	on Method:	EPA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:1	3 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/10/20 13:30	2/13/20 10:1	3 1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	2/10/20 13:30	2/13/20 10:1	3 1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	on Method:	EPA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 09:57	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:1	1 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/5/20 11:20	2/5/20 11:20	1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/5/20 14:09	2/5/20 14:09	1	Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 11:16	2/6/20 11:16	1	Not Detected	mg/L	0.50	1	U

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

Batch QC Summary



Customer Account: WMWGORGFB **Sample Date:** 2/3/20 12:18

Customer ID:

Delivery Date: 2/4/20 10:27

Description: Gorgas Gypsum Field Blank

Laboratory ID Number: BA02286

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORGFB

Sample Date:

2/3/20 12:18

Customer ID:

Delivery Date:

2/4/20 10:27

Description: Gorgas Gypsum Field Blank

Laboratory ID Number: BA02286

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02291	Chloride	mg/L	-0.00879	0.50	10.0	11.5	1.65	10.1	9 to 11	97.8	80 to 120	4.15	20
BA02291	Fluoride	mg/L	0.0246	0.05	2.50	2.97	0.369	2.60	2.25 to 2.75	104	80 to 120	0.271	20
BA02291	Sulfate	mg/L	-0.417	0.50	2000	4090	2010	18.6	18 to 22	108	80 to 120	4.58	20
BA02543	Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5

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

Expiration: June 30, 2017

^{*} 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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-1LLocation Code:WMWGORGCollected:2/3/20 12:28

Customer ID:

Submittal Date: 2/4/20 10:27

Laboratory ID Number: BA02287

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:10	6 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/10/20 13:30	2/13/20 11:3	8 20.3	172	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 10:10	6 1.015	0.0292	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:00	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:00	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:00	1.015	0.00995	mg/L	0.002	0.01	J
* Beryllium, Total	2/6/20 15:00	2/7/20 10:00	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:00	1.015	0.00182	mg/L	0.0003	0.001	
* Chromium, Total	2/6/20 15:00	2/7/20 10:00	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:00	1.015	0.0495	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:00	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:00	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:00	1.015	0.00272	mg/L	0.002	0.01	J
* Thallium, Total	2/6/20 15:00	2/7/20 10:00	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35		3 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:30	0 1	2380	mg/L		125	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/5/20 11:21	2/5/20 11:21	1	2.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/5/20 14:10	2/5/20 14:10	1	0.0982	mg/L	0.05	0.1	J
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 11:17	2/6/20 11:17	80	1510	mg/L	40.00	80	
Analytical Method: Field Measurements	Anal	yst: AWG						
Conductivity	2/3/20 12:25	2/3/20 12:25		2376.80	uS/cm			FΑ
рН	2/3/20 12:25	2/3/20 12:25		5.00	SU			FA
Temperature	2/3/20 12:25	2/3/20 12:25		19.79	С			FΑ
Turbidity	2/3/20 12:25	2/3/20 12:25		0.52	NTU			F.A

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/3/20 12:28

Customer ID:

Delivery Date: 2/4/20 10:27

Description: Gorgas Gypsum - MW-1L

Laboratory ID Number: BA02287

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/3/20 12:28

Customer ID:

Delivery Date: 2/4/20 10:27

Description: Gorgas Gypsum - MW-1L

Laboratory ID Number: BA02287

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02291	Chloride	mg/L	-0.00879	0.50	10.0	11.5	1.65	10.1	9 to 11	97.8	80 to 120	4.15	20
BA02543	Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5
BA02291	Fluoride	mg/L	0.0246	0.05	2.50	2.97	0.369	2.60	2.25 to 2.75	104	80 to 120	0.271	20
BA02291	Sulfate	mg/L	-0.417	0.50	2000	4090	2010	18.6	18 to 22	108	80 to 120	4.58	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

Expiration: June 30, 2017

^{*} 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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-2LLocation Code:WMWGORGCollected:2/3/20 13:30

Customer ID:

Submittal Date: 2/4/20 10:27

Laboratory ID Number: BA02288

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:19	9 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/10/20 13:30	2/13/20 11:4	0 20.3	172	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 10:19	9 1.015	0.0534	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:02	1.015	0.0122	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:02	1.015	0.0193	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:02	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:10	6 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:30	0 1	1440	mg/L		71.4	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/5/20 11:23	2/5/20 11:23	1	2.48	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/5/20 14:11	2/5/20 14:11	1	0.182	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 11:18	2/6/20 11:18	80	803	mg/L	40.00	80	
Analytical Method: Field Measurements	Anal	yst: AWG						
Conductivity	2/3/20 13:27	2/3/20 13:27		1697.19	uS/cm			F.A
рН	2/3/20 13:27	2/3/20 13:27		5.95	SU			FA
Temperature	2/3/20 13:27	2/3/20 13:27		19.09	С			F/
Turbidity	2/3/20 13:27	2/3/20 13:27		0.61	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/3/20 13:30

Customer ID:

Delivery Date: 2/4/20 10:27

Description: Gorgas Gypsum - MW-2L

Laboratory ID Number: BA02288

	·		MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20

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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/3/20 13:30

Customer ID:

Delivery Date: 2/4/20 10:27

Description: Gorgas Gypsum - MW-2L

Laboratory ID Number: BA02288

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02291	Chloride	mg/L	-0.00879	0.50	10.0	11.5	1.65	10.1	9 to 11	97.8	80 to 120	4.15	20
BA02543	Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5
BA02291	Fluoride	mg/L	0.0246	0.05	2.50	2.97	0.369	2.60	2.25 to 2.75	104	80 to 120	0.271	20
BA02291	Sulfate	mg/L	-0.417	0.50	2000	4090	2010	18.6	18 to 22	108	80 to 120	4.58	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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-2L DUPLocation Code:WMWGORGCollected:2/3/20 13:30

Customer ID:

Submittal Date: 2/4/20 10:27

Laboratory ID Number: BA02289

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	EPA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:2	2 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/10/20 13:30	2/13/20 11:4	3 20.3	182	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 10:2	2 1.015	0.0538	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	EPA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:05	1.015	0.0117	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:05	1.015	0.0191	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:05	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:1	8 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	1430	mg/L		71.4	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/5/20 11:24	2/5/20 11:24	1	2.53	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/5/20 14:13	2/5/20 14:13	1	0.182	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 11:20	2/6/20 11:20	100	814	mg/L	50.00	100	
Analytical Method: Field Measurements		yst: AWG						
Conductivity	2/3/20 13:27	, 2/3/20 13:27		1697.19	uS/cm			FA
рН	2/3/20 13:27	2/3/20 13:27		5.95	SU			FA
Temperature	2/3/20 13:27	2/3/20 13:27		19.09	С			FΑ
Turbidity	2/3/20 13:27	2/3/20 13:27		0.61	NTU			F.A

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/3/20 13:30

Customer ID:

Delivery Date: 2/4/20 10:27

Description: Gorgas Gypsum - MW-2L DUP

Laboratory ID Number: BA02289

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/3/20 13:30

Customer ID:

Delivery Date: 2/4/20 10:27

Description: Gorgas Gypsum - MW-2L DUP

Laboratory ID Number: BA02289

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02291	Chloride	mg/L	-0.00879	0.50	10.0	11.5	1.65	10.1	9 to 11	97.8	30 to 120	4.15	20
BA02543	Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5
BA02291	Fluoride	mg/L	0.0246	0.05	2.50	2.97	0.369	2.60	2.25 to 2.75	104	30 to 120	0.271	20
BA02291	Sulfate	mg/L	-0.417	0.50	2000	4090	2010	18.6	18 to 22	108	30 to 120	4.58	20

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Expiration: June 30, 2017

^{*} 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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3LLocation Code:WMWGORGCollected:2/3/20 14:50

Customer ID:

Submittal Date: 2/4/20 10:28

Laboratory ID Number: BA02290

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:2	5 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/10/20 13:30	2/13/20 11:4	6 20.3	276	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 10:2	5 1.015	0.0825	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:08	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:08	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:08	1.015	0.00860	mg/L	0.002	0.01	J
* Beryllium, Total	2/6/20 15:00	2/7/20 10:08	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:08	1.015	0.000988	mg/L	0.0003	0.001	J
* Chromium, Total	2/6/20 15:00	2/7/20 10:08	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:08	1.015	0.0114	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:08	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:08	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:08	1.015	0.0120	mg/L	0.002	0.01	
* Thallium, Total	2/6/20 15:00	2/7/20 10:08	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:2	0 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	3530	mg/L		178.6	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/5/20 11:25	2/5/20 11:25	1	2.12	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/5/20 14:14	2/5/20 14:14	1	0.256	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 11:21	2/6/20 11:21	100	2290	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	yst: AWG						
Conductivity	2/3/20 14:45	, 2/3/20 14:45		3312.09	uS/cm			FA
рН	2/3/20 14:45	2/3/20 14:45		5.54	SU			FA
Temperature	2/3/20 14:45	2/3/20 14:45		21.57	C			F.A
Turbidity	2/3/20 14:45	2/3/20 14:45		0.96	NTU			F.A

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/3/20 14:50

Customer ID:

Delivery Date: 2/4/20 10:28

Description: Gorgas Gypsum - MW-3L

Laboratory ID Number: BA02290

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/3/20 14:50

Customer ID:

Delivery Date: 2/4/20 10:28

Description: Gorgas Gypsum - MW-3L

Laboratory ID Number: BA02290

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02291	Chloride	mg/L	-0.00879	0.50	10.0	11.5	1.65	10.1	9 to 11	97.8	80 to 120	4.15	20
BA02291	Fluoride	mg/L	0.0246	0.05	2.50	2.97	0.369	2.60	2.25 to 2.75	104	80 to 120	0.271	20
BA02291	Sulfate	mg/L	-0.417	0.50	2000	4090	2010	18.6	18 to 22	108	80 to 120	4.58	20
BA02543	Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5

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Expiration: June 30, 2017

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Issued By: State of Florida, Department of Health

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4LLocation Code:WMWGORGCollected:2/3/20 16:10

Customer ID:

Submittal Date: 2/4/20 10:28

Laboratory ID Number: BA02291

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q		
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparation Method: EPA 1638						
* Boron, Total	2/10/20 13:30	2/13/20 10:2	8 1.015	0.0433	mg/L	0.03	0.1	J		
* Calcium, Total	2/10/20 13:30	2/13/20 11:4	9 20.3	265	mg/L	2.03	10.15			
* Lithium, Total	2/10/20 13:30	2/13/20 10:2	8 1.015	0.0556	mg/L	0.01	0.02			
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638				
* Antimony, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.0008	0.003	U		
* Arsenic, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.001	0.005	U		
* Barium, Total	2/6/20 15:00	2/7/20 10:10	1.015	0.0103	mg/L	0.002	0.01			
* Beryllium, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.0006	0.003	U		
* Cadmium, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.0003	0.001	U		
* Chromium, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.002	0.01	U		
* Cobalt, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.002	0.005	U		
* Lead, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.001	0.005	U		
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.002	0.01	U		
* Selenium, Total	2/6/20 15:00	2/7/20 10:10	1.015	0.00212	mg/L	0.002	0.01	J		
* Thallium, Total	2/6/20 15:00	2/7/20 10:10	1.015	Not Detected	mg/L	0.0002	0.001	U		
Analytical Method: EPA 245.1	Anal	yst: GAS								
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:2	3 1	Not Detected	mg/L	0.0003	0.0005	U		
Analytical Method: SM 2540C	Anal	yst: TJW								
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	3240	mg/L		178.6			
Analytical Method: SM4500Cl E	Anal	yst: JCC								
* Chloride	2/5/20 11:26	2/5/20 11:26	1	1.72	mg/L	0.50	1			
Analytical Method: SM4500F G 2017	Anal	yst: JCC								
* Fluoride	2/5/20 14:15	2/5/20 14:15	1	0.370	mg/L	0.05	0.1			
Analytical Method: SM4500SO4 E	Anal	yst: JCC								
* Sulfate	2/6/20 11:26	2/6/20 11:26	100	1920	mg/L	50.00	100			
Analytical Method: Field Measurements		yst: AWG								
Conductivity	2/3/20 16:04	2/3/20 16:04		3119.33	uS/cm			FA		
pH	2/3/20 16:04	2/3/20 16:04		6.14	SU			FA		
Temperature	2/3/20 16:04	2/3/20 16:04		20.34	C			FΑ		
Turbidity	2/3/20 16:04	2/3/20 16:04		0.41	NTU			F.A		

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/3/20 16:10

Customer ID:

Delivery Date: 2/4/20 10:28

Description: Gorgas Gypsum - MW-4L

Laboratory ID Number: BA02291

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20

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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/3/20 16:10

Customer ID:

Delivery Date: 2/4/20 10:28

Description: Gorgas Gypsum - MW-4L

Laboratory ID Number: BA02291

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02291	Chloride	mg/L	-0.00879	0.50	10.0	11.5	1.65	10.1	9 to 11	97.8	80 to 120	4.15	20
BA02543	Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5
BA02291	Fluoride	mg/L	0.0246	0.05	2.50	2.97	0.369	2.60	2.25 to 2.75	104	80 to 120	0.271	20
BA02291	Sulfate	mg/L	-0.417	0.50	2000	4090	2010	18.6	18 to 22	108	80 to 120	4.58	20

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Expiration: June 30, 2017

^{*} 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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3VLocation Code:WMWGORGCollected:2/3/20 14:25

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02543

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	EPA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:3	1 1.015	3.06	mg/L	0.03	0.1	
* Calcium, Total	2/10/20 13:30	2/13/20 11:52	2 20.3	504	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 10:3	1 1.015	0.460	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	EPA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:13	1.015	0.0215	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:13	1.015	0.0135	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:13	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:2	5 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:30	0 1	3660	mg/L		208.3	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:19	2/7/20 11:19	40	338	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:27	2/7/20 14:27	1	0.438	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:42	2/6/20 14:42	100	1970	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/3/20 14:21	2/3/20 14:21		3331.61	uS/cm			F.A
pН	2/3/20 14:21	2/3/20 14:21		5.88	SU			F.A
Temperature	2/3/20 14:21	2/3/20 14:21		21.33	С			F/
Turbidity	2/3/20 14:21	2/3/20 14:21		1.28	NTU			F.

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/3/20 14:25

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BA02543

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	l Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/3/20 14:25

Customer ID:

Delivery Date:

2/6/20 13:21

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BA02543

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	Limit
BA02552	Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	20
BA02543	Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5
BA02552	Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552	Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102	80 to 120	1.50	20

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Expiration: June 30, 2017

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Issued By: State of Florida, Department of Health

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3Location Code:WMWGORGCollected:2/3/20 15:42

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02544

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:3	4 1.015	2.13	mg/L	0.03	0.1	
* Calcium, Total	2/10/20 13:30	2/13/20 11:5	5 20.3	589	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 10:3	4 1.015	0.474	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:15	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:15	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:15	1.015	0.0141	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:15	1.015	0.00141	mg/L	0.0006	0.003	J
* Cadmium, Total	2/6/20 15:00	2/7/20 10:15	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:15	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:15	1.015	0.0843	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:15	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:15	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:15	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:15	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:2	7 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	4920	mg/L		250	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:21	2/7/20 11:21	40	267	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:29	2/7/20 14:29	1	0.427	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:43	2/6/20 14:43	100	2840	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/3/20 15:39	2/3/20 15:39		4133.61	uS/cm			FA
рН	2/3/20 15:39	2/3/20 15:39		5.98	SU			FA
Temperature	2/3/20 15:39	2/3/20 15:39		20.43	С			F.A
Turbidity	2/3/20 15:39	2/3/20 15:39		3.56	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/3/20 15:42

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BA02544

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/3/20 15:42

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BA02544

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02543 Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5
BA02552 Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552 Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102	80 to 120	1.50	20
BA02552 Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4VLocation Code:WMWGORGCollected:2/3/20 16:54

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02545

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparat	ion Method:	EPA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:3	7 1.015	5.25	mg/L	0.03	0.1	
* Calcium, Total	2/10/20 13:30	2/13/20 11:5	8 20.3	184	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 10:3	7 1.015	0.332	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparat	ion Method: l	EPA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:18	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:18	1.015	0.00101	mg/L	0.001	0.005	J
* Barium, Total	2/6/20 15:00	2/7/20 10:18	1.015	0.0103	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:18	1.015	0.00362	mg/L	0.0006	0.003	
* Cadmium, Total	2/6/20 15:00	2/7/20 10:18	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:18	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:18	1.015	0.108	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:18	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:18	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:18	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:18	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:3	0 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Analy	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	1290	mg/L		71.4	
Analytical Method: SM4500Cl E	Analy	yst: JCC						
* Chloride	2/7/20 11:22	2/7/20 11:22	20	101	mg/L	10.00	20	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:30	2/7/20 14:30	1	0.555	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:44	2/6/20 14:44	80	808	mg/L	40.00	80	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/3/20 16:51	2/3/20 16:51		1481.03	uS/cm			F.A
рН	2/3/20 16:51	2/3/20 16:51		5.84	SU			FA
Temperature	2/3/20 16:51	2/3/20 16:51		19.72	С			FA
Turbidity	2/3/20 16:51	2/3/20 16:51		2.76	NTU			F/

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/3/20 16:54

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BA02545

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/3/20 16:54

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BA02545

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02552	Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5 8	30 to 120	3.75	20
BA02543	Solids, Dissolved	mg/L	-2.00	25			3660	53.0	40 to 60			0.00	5
BA02552	Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115 8	30 to 120	4.06	20
BA02552	Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102 8	30 to 120	1.50	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

Expiration: June 30, 2017

^{*} 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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4

Location Code: Collected:

WMWGORG 2/4/20 09:55

Customer ID:

Submittal Date:

2/6/20 13:21

Analyze nalyst: RDA 30 2/13/2 30 2/13/2 nalyst: DLJ 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20	0 10:40 0 12:01 0 10:40 10:21 10:21 10:21	1.015 20.3 1.015 1.015 1.015 1.015	2.74 116 0.290 <i>Pre</i>	Units paration Method: mg/L mg/L mg/L paration Method: cted mg/L mg/L mg/L	0.03 2.03 0.01	0.1 10.15 0.02	Q RA
30 2/13/2 30 2/13/2 30 2/13/2 nalyst: DLJ 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20	0 12:01 0 10:40 10:21 10:21 10:21	20.3 1.015 1.015 1.015	2.74 116 0.290 <i>Pre</i> _i Not Dete	mg/L mg/L mg/L paration Method: cted mg/L	0.03 2.03 0.01 EPA 1638	10.15 0.02	RA
30 2/13/2 30 2/13/2 nalyst: DLJ 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20	0 12:01 0 10:40 10:21 10:21 10:21	20.3 1.015 1.015 1.015	116 0.290 <i>Pre</i> _j Not Dete	mg/L mg/L paration Method: cted mg/L	2.03 0.01 EPA 1638	10.15 0.02	RA
30 2/13/2 nalyst: DLJ 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20	0 10:40 10:21 10:21 10:21	1.015 1.015 1.015	0.290 <i>Pre</i> _j Not Dete	mg/L paration Method: cted mg/L	0.01 EPA 1638	0.02	RA
nalyst: DLJ 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20	10:21 10:21 10:21	1.015 1.015	<i>Pre</i> Not Dete	paration Method: cted mg/L	EPA 1638		
0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20	10:21 10:21	1.015	Not Dete	cted mg/L		0.003	
0 2/7/20 0 2/7/20 0 2/7/20 0 2/7/20	10:21 10:21	1.015		• • • • • • • • • • • • • • • • • • • •	0.0008	0.003	
0 2/7/20 0 2/7/20 0 2/7/20	10:21		0.00128	ma/l		0.003	U
0 2/7/20 0 2/7/20		1 015		mg/L	0.001	0.005	J
0 2/7/20	10:21	1.013	0.0124	mg/L	0.002	0.01	
-		1.015	0.00415	mg/L	0.0006	0.003	
0 2/7/20	10:21	1.015	0.00143	mg/L	0.0003	0.001	
0 2/1/20	10:21	1.015	Not Dete	cted mg/L	0.002	0.01	U
0 2/7/20	10:21	1.015	0.217	mg/L	0.002	0.005	
0 2/7/20	10:21	1.015	Not Dete	cted mg/L	0.001	0.005	U
0 2/7/20	10:21	1.015	Not Dete	cted mg/L	0.002	0.01	U
0 2/7/20	10:21	1.015	Not Dete	cted mg/L	0.002	0.01	U
0 2/7/20	10:21	1.015	Not Dete	cted mg/L	0.0002	0.001	U
nalyst: GAS							
35 2/11/2	0 14:32	1	Not Dete	cted mg/L	0.0003	0.0005	U
nalyst: TJW							
0 2/11/2	0 10:30	1	978	mg/L		50	
nalyst: JCC							
3 2/7/20	11:23	20	43.2	mg/L	10.00	20	
nalyst: JCC							
1 2/7/20	14:31	1	Not Dete	cted mg/L	0.05	0.1	U
nalyst: JCC							
5 2/6/20	14:45	80	571	mg/L	40.00	80	
nalyst: TJD							
-	09:53		1221.02	uS/cm			FA
3 2/4/20	09:53		3.83	SU			FA
							FA
-							FA
	3 2/7/20 nalyst: JCC 1 2/7/20 nalyst: JCC 5 2/6/20 nalyst: TJD 13 2/4/20 13 2/4/20	3 2/7/20 11:23 nalyst: JCC 1 2/7/20 14:31 nalyst: JCC 5 2/6/20 14:45 nalyst: TJD 3 2/4/20 09:53 3 2/4/20 09:53 3 2/4/20 09:53	3 2/7/20 11:23 20 nalyst: JCC 11 2/7/20 14:31 1 nalyst: JCC 5 2/6/20 14:45 80 nalyst: TJD 13 2/4/20 09:53 13 2/4/20 09:53 13 2/4/20 09:53	3 2/7/20 11:23 20 43.2 nalyst: JCC 1 2/7/20 14:31 1 Not Dete nalyst: JCC 5 2/6/20 14:45 80 571 nalyst: TJD 13 2/4/20 09:53 1221.02 13 2/4/20 09:53 3.83 13 2/4/20 09:53 19.91	3 2/7/20 11:23 20 43.2 mg/L nalyst: JCC 1 2/7/20 14:31 1 Not Detected mg/L nalyst: JCC 5 2/6/20 14:45 80 571 mg/L nalyst: TJD 13 2/4/20 09:53 1221.02 uS/cm 13 2/4/20 09:53 3.83 SU 13 2/4/20 09:53 19.91 C	3 2/7/20 11:23 20 43.2 mg/L 10.00 nalyst: JCC 1 2/7/20 14:31 1 Not Detected mg/L 0.05 nalyst: JCC 5 2/6/20 14:45 80 571 mg/L 40.00 nalyst: TJD 13 2/4/20 09:53 1221.02 uS/cm 13 2/4/20 09:53 SU 19.91 C	3 2/7/20 11:23 20 43.2 mg/L 10.00 20 malyst: JCC 11 2/7/20 14:31 1 Not Detected mg/L 0.05 0.1 malyst: JCC 5 2/6/20 14:45 80 571 mg/L 40.00 80 malyst: TJD 13 2/4/20 09:53 1221.02 uS/cm 13 2/4/20 09:53 3.83 SU 13 2/4/20 09:53 19.91 C

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/4/20 09:55

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BA02546

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02546 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0950	0.0954	0.0883	0.085 to 0.115	95.0	70 to 130	0.445	20
BA02546 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.109	0.110	0.0917	0.085 to 0.115	96.7	70 to 130	0.948	20
BA02546 Mercury, Total by CVAA	mg/L	-0.00000703	0.0005	0.004	0.00409	0.00406	0.00386	0.0034 to 0.0046	102	70 to 130	0.812	20
BA02546 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.525	0.523	0.201	0.17 to 0.23	118	70 to 130	0.338	20
BA02546 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.100	0.102	0.0962	0.085 to 0.115	96.0	70 to 130	2.15	20
BA02546 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0950	0.0939	0.0934	0.085 to 0.115	95.0	70 to 130	1.12	20
BA02546 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	100	70 to 130	1.17	20
BA02546 Calcium, Total	mg/L	-0.0107	0.1518	5.00	119	114	5.23	4.25 to 5.75	48.8	70 to 130	4.41	20
BA02546 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0966	0.0953	0.0973	0.085 to 0.115	95.1	70 to 130	1.32	20
BA02546 Boron, Total	mg/L	0.00144	0.0650254	1.00	3.71	3.72	1.01	0.85 to 1.15	97.4	70 to 130	0.167	20
BA02546 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.0980	0.0986	0.0980	0.085 to 0.115	98.0	70 to 130	0.575	20
BA02546 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.514	20
BA02546 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0858	0.0863	0.105	0.085 to 0.115	85.8	70 to 130	0.560	20
BA02546 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.313	0.311	0.0961	0.085 to 0.115	95.7	70 to 130	0.448	20
BA02546 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.102	0.0991	0.0995	0.085 to 0.115	102	70 to 130	2.84	20

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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/4/20 09:55

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BA02546

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02551	Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02552	Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	20
BA02552	Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552	Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102	80 to 120	1.50	20

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

Expiration: June 30, 2017

^{*} 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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4 DUPLocation Code:WMWGORGCollected:2/4/20 09:55

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02547

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 10:5	9 1.015	2.74	mg/L	0.03	0.1	
* Calcium, Total	2/10/20 13:30	2/13/20 12:1	6 20.3	115	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 10:5	9 1.015	0.288	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:36	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:36	1.015	0.00127	mg/L	0.001	0.005	J
* Barium, Total	2/6/20 15:00	2/7/20 10:36	1.015	0.0122	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:36	1.015	0.00435	mg/L	0.0006	0.003	
* Cadmium, Total	2/6/20 15:00	2/7/20 10:36	1.015	0.00142	mg/L	0.0003	0.001	
* Chromium, Total	2/6/20 15:00	2/7/20 10:36	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:36	1.015	0.218	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:36	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:36	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:36	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:36	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:4	9 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	986	mg/L		50	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:24	2/7/20 11:24	20	42.8	mg/L	10.00	20	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:32	2/7/20 14:32	1	Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:47	2/6/20 14:47	80	573	mg/L	40.00	80	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/4/20 09:53	2/4/20 09:53		1221.02	uS/cm			FA
pН	2/4/20 09:53	2/4/20 09:53		3.83	SU			FA
Temperature	2/4/20 09:53	2/4/20 09:53		19.91	С			F <i>A</i>
Turbidity	2/4/20 09:53	2/4/20 09:53		4.79	NTU			F.A

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/4/20 09:55

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-4 DUP

Laboratory ID Number: BA02547

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20

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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/4/20 09:55

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-4 DUP

Laboratory ID Number: BA02547

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02551 Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02552 Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	20
BA02552 Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552 Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102	80 to 120	1.50	20

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Expiration: June 30, 2017

^{*} 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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-12HLocation Code:WMWGORGCollected:2/4/20 11:12

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02548

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 11:0	2 1.015	0.0748	mg/L	0.03	0.1	J
* Calcium, Total	2/10/20 13:30	2/13/20 12:19	9 20.3	158	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 11:0	2 1.015	0.394	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:39	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:39	1.015	0.00157	mg/L	0.001	0.005	J
* Barium, Total	2/6/20 15:00	2/7/20 10:39	1.015	0.0141	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:39	1.015	0.00709	mg/L	0.0006	0.003	
* Cadmium, Total	2/6/20 15:00	2/7/20 10:39	1.015	0.00301	mg/L	0.0003	0.001	
* Chromium, Total	2/6/20 15:00	2/7/20 10:39	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:39	1.015	0.351	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:39	1.015	0.00334	mg/L	0.001	0.005	J
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:39	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:39	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:39	1.015	0.000491	mg/L	0.0002	0.001	J
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:5	1 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:30	0 1	1580	mg/L		71.4	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:25	2/7/20 11:25	1	2.34	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:33	2/7/20 14:33	1	Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:48	2/6/20 14:48	80	978	mg/L	40.00	80	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/4/20 11:09	2/4/20 11:09		1706.04	uS/cm			FA
рН	2/4/20 11:09	2/4/20 11:09		4.57	SU			FA
Temperature	2/4/20 11:09	2/4/20 11:09		19.23	С			F.A
Turbidity	2/4/20 11:09	2/4/20 11:09		4.82	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/4/20 11:12

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BA02548

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/4/20 11:12

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BA02548

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02552	Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552	Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102	80 to 120	1.50	20
BA02551	Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02552	Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	20

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Expiration: June 30, 2017

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Issued By: State of Florida, Department of Health

Certificate Of Analysis



Description: Gorgas Gypsum - MW-11HLocation Code:WMWGORGCollected:2/4/20 12:40

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02549

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 11:0	5 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/10/20 13:30	2/13/20 12:2	2 20.3	163	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 11:0	5 1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:41	1.015	0.0148	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:41	1.015	0.00582	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:41	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:5	3 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	1200	mg/L		71.4	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:27	2/7/20 11:27	1	4.27	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:35	2/7/20 14:35	1	0.0743	mg/L	0.05	0.1	J
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:49	2/6/20 14:49	80	725	mg/L	40.00	80	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/4/20 12:38	2/4/20 12:38		1472.55	uS/cm			FA
pН	2/4/20 12:38	2/4/20 12:38		6.02	SU			FA
Temperature	2/4/20 12:38	2/4/20 12:38		19.26	С			FΑ
Turbidity	2/4/20 12:38	2/4/20 12:38		6.12	NTU			F.A

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/4/20 12:40

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BA02549

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/4/20 12:40

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BA02549

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02552 Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552 Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102	80 to 120	1.50	20
BA02551 Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02552 Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	20

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Expiration: June 30, 2017

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Issued By: State of Florida, Department of Health

Certificate Of Analysis



Description: Gorgas Gypsum - MW-13HLocation Code:WMWGORGCollected:2/4/20 13:35

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02550

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 11:0	8 1.015	0.202	mg/L	0.03	0.1	
* Calcium, Total	2/10/20 13:30	2/13/20 12:2	5 20.3	171	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 11:0	8 1.015	0.0506	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:44	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:44	1.015	0.160	mg/L	0.001	0.005	
* Barium, Total	2/6/20 15:00	2/7/20 10:44	1.015	0.0296	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:44	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:44	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:44	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:44	1.015	0.0442	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:44	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:44	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:44	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:44	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:50	6 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:30	0 1	1200	mg/L		71.4	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:28	2/7/20 11:28	1	12.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:36	2/7/20 14:36	1	0.115	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:50	2/6/20 14:50	80	720	mg/L	40.00	80	
Analytical Method: Field Measurements		yst: TJD						
Conductivity	2/4/20 13:33	2/4/20 13:33		1502.46	uS/cm			FΑ
рН	2/4/20 13:33	2/4/20 13:33		6.00	SU			FA
Temperature	2/4/20 13:33	2/4/20 13:33		19.29	С			FΑ
Turbidity	2/4/20 13:33	2/4/20 13:33		1.52	NTU			F.A

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/4/20 13:35

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BA02550

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	l Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/4/20 13:35

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BA02550

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02552	Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552	Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102 8	80 to 120	1.50	20
BA02551	Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02552	Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-9HLocation Code:WMWGORGCollected:2/4/20 14:48

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02551

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: E	PA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 11:1	1 1.015	9.63	mg/L	0.03	0.1	
* Calcium, Total	2/10/20 13:30	2/13/20 12:28	3 20.3	413	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 11:1	1 1.015	0.203	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: E	PA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:47	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:47	1.015	0.00123	mg/L	0.001	0.005	J
* Barium, Total	2/6/20 15:00	2/7/20 10:47	1.015	0.0148	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:47	1.015	0.000929	mg/L	0.0006	0.003	J
* Cadmium, Total	2/6/20 15:00	2/7/20 10:47	1.015	0.000349	mg/L	0.0003	0.001	J
* Chromium, Total	2/6/20 15:00	2/7/20 10:47	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:47	1.015	0.159	mg/L	0.002	0.005	
* Lead, Total	2/6/20 15:00	2/7/20 10:47	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:47	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:47	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:47	1.015	0.000233	mg/L	0.0002	0.001	J
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 14:58	3 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:30	0 1	3110	mg/L		178.6	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:29	2/7/20 11:29	40	139	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:37	2/7/20 14:37	1	0.205	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:52	2/6/20 14:52	100	1710	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/4/20 14:45	2/4/20 14:45		3250.54	uS/cm			FA
рН	2/4/20 14:45	2/4/20 14:45		5.34	SU			FA
Temperature	2/4/20 14:45	2/4/20 14:45		20.45	С			FΑ
Turbidity	2/4/20 14:45	2/4/20 14:45		3.91	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/4/20 14:48

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BA02551

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	l Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20

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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/4/20 14:48

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BA02551

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02552 Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552 Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102	80 to 120	1.50	20
BA02551 Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02552 Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	20

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Expiration: June 30, 2017

^{*} 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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-8Location Code:WMWGORGCollected:2/4/20 16:35

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02552

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: I	EPA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 11:1	4 1.015	1.47	mg/L	0.03	0.1	
* Calcium, Total	2/10/20 13:30	2/13/20 12:3	1 20.3	461	mg/L	2.03	10.15	
* Lithium, Total	2/10/20 13:30	2/13/20 11:1	4 1.015	0.188	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: I	EPA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:49	1.015	0.0209	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:49	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 15:0	0 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	3190	mg/L		178.6	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:30	2/7/20 11:30	40	94.1	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:38	2/7/20 14:38	1	0.132	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 14:53	2/6/20 14:53	100	1570	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/4/20 16:32	2/4/20 16:32		3470.58	uS/cm			F
рН	2/4/20 16:32	2/4/20 16:32		6.85	SU			F
Temperature	2/4/20 16:32	2/4/20 16:32		19.85	С			F
Turbidity	2/4/20 16:32	2/4/20 16:32		1.6	NTU			F

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/4/20 16:35

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BA02552

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/4/20 16:35

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BA02552

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02551	Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02552	Sulfate	mg/L	-0.434	0.50	2000	3400	1630	18.2	18 to 22	91.5	80 to 120	3.75	20
BA02552	Chloride	mg/L	-0.0143	0.50	400	553	98.0	10.5	9 to 11	115	80 to 120	4.06	20
BA02552	Fluoride	mg/L	0.0121	0.05	2.50	2.68	0.134	2.61	2.25 to 2.75	102	80 to 120	1.50	20

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

Expiration: June 30, 2017

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Issued By: State of Florida, Department of Health

Certificate Of Analysis



Description: Gorgas Gypsum Field BlankLocation Code:WMWGORGFBCollected:2/4/20 17:00

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02553

on Method: EP	PA 1638		
mg/L	0.03	0.1	U
mg/L	0.1	0.5	U
mg/L	0.01	0.02	U
on Method: EP.	PA 1638		
mg/L	0.0008	0.003	U
mg/L	0.001	0.005	U
mg/L	0.002	0.01	U
mg/L	0.0006	0.003	U
mg/L	0.0003	0.001	U
mg/L	0.002	0.01	U
mg/L	0.002	0.005	U
mg/L	0.001	0.005	U
mg/L	0.002	0.01	U
mg/L	0.002	0.01	U
mg/L	0.0002	0.001	U
mg/L	0.0003	0.0005	U
mg/L		25	U
mg/L	0.50	1	U
mg/L	0.05	0.1	U
mg/L	0.50	1	U
	mg/L	mg/L 0.05	mg/L 0.05 0.1

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

Batch QC Summary



Customer Account: WMWGORGFB **Sample Date:** 2/4/20 17:00

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum Field Blank

Laboratory ID Number: BA02553

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20

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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

^{*} Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report Laboratory certification ID: E571114

Batch QC Summary



Customer Account: WMWGORGFB

Sample Date:

2/4/20 17:00

Customer ID:

Delivery Date:

2/6/20 13:21

Description: Gorgas Gypsum Field Blank

Laboratory ID Number: BA02553

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02551	Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02555	Sulfate	mg/L	-0.528	0.50	20.0	18.0	-0.413	18.2	18 to 22	90.0	80 to 120	0.00	20
BA02555	Chloride	mg/L	-0.00614	0.50	10.0	10.3	0.0855	10.4	9 to 11	103	80 to 120	0.00	20
BA02555	Fluoride	mg/L	0.00436	0.05	2.50	2.54	0.00833	2.57	2.25 to 2.75	102	80 to 120	0.00	20

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Expiration: June 30, 2017

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Issued By: State of Florida, Department of Health

Certificate Of Analysis



Description: Gorgas Gypsum - MW-8VLocation Code:WMWGORGCollected:2/5/20 13:23

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02554

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method:	EPA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 11:2	0 1.015	0.136	mg/L	0.03	0.1	
* Calcium, Total	2/10/20 13:30	2/13/20 11:2	0 1.015	37.3	mg/L	0.1	0.5	
* Lithium, Total	2/10/20 13:30	2/13/20 11:2	0 1.015	0.327	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: l	EPA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:55	1.015	0.00232	mg/L	0.001	0.005	J
* Barium, Total	2/6/20 15:00	2/7/20 10:55	1.015	0.0960	mg/L	0.002	0.01	
* Beryllium, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:55	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 15:0	5 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1	1100	mg/L		71.4	
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	2/7/20 11:48	2/7/20 11:48	1	9.05	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	2/7/20 14:52	2/7/20 14:52	1	0.162	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
* Sulfate	2/6/20 15:06	2/6/20 15:06	16	223	mg/L	8.00	16	
Analytical Method: Field Measurements	Anal	yst: TJD						
Conductivity	2/5/20 13:20	2/5/20 13:20		1739.73	uS/cm			FA
рН	2/5/20 13:20	2/5/20 13:20		7.48	SU			FA
Temperature	2/5/20 13:20	2/5/20 13:20		20.25	С			F/
Turbidity	2/5/20 13:20	2/5/20 13:20		1.21	NTU			F/

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/5/20 13:23

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BA02554

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20

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

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/5/20 13:23

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BA02554

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02551	Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02555	Sulfate	mg/L	-0.528	0.50	20.0	18.0	-0.413	18.2	18 to 22	90.0	80 to 120	0.00	20
BA02555	Chloride	mg/L	-0.00614	0.50	10.0	10.3	0.0855	10.4	9 to 11	103	80 to 120	0.00	20
BA02555	Fluoride	mg/L	0.00436	0.05	2.50	2.54	0.00833	2.57	2.25 to 2.75	102	80 to 120	0.00	20

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Expiration: June 30, 2017

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Issued By: State of Florida, Department of Health

Certificate Of Analysis



Description: Gorgas Gypsum Equipment BlankLocation Code:WMWGORGEBCollected:2/5/20 14:00

Customer ID:

Submittal Date: 2/6/20 13:21

Laboratory ID Number: BA02555

Name	Prepared	Analyzed	Vio Spec D)F	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method:	EPA 1638		
* Boron, Total	2/10/20 13:30	2/13/20 11:2	3 1.0	015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/10/20 13:30	2/13/20 11:2	3 1.0	015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	2/10/20 13:30	2/13/20 11:2	3 1.0	015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method:	EPA 1638		
* Antimony, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/6/20 15:00	2/7/20 10:57	1.0	015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS							
* Mercury, Total by CVAA	2/10/20 11:35	2/11/20 15:0	8 1		Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW							
* Solids, Dissolved	2/7/20 15:30	2/11/20 10:3	0 1		Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	2/7/20 11:49	2/7/20 11:49	1		Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	2/7/20 14:53	2/7/20 14:53	1		Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E	Anal	yst: JCC							
* Sulfate	2/6/20 15:07	2/6/20 15:07	1		Not Detected	mg/L	0.50	1	U

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

Batch QC Summary



Customer Account: WMWGORGEB **Sample Date:** 2/5/20 14:00

Customer ID:

Delivery Date: 2/6/20 13:21

Description: Gorgas Gypsum Equipment Blank

Laboratory ID Number: BA02555

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02555 Boron, Total	mg/L	0.00144	0.0650254	1.00	0.995	0.997	1.01	0.85 to 1.15	99.5	70 to 130	0.196	20
BA02555 Chromium, Total	mg/L	0.0000464	0.00044	0.10	0.101	0.0991	0.0980	0.085 to 0.115	101	70 to 130	1.99	20
BA02555 Antimony, Total	mg/L	0.000176	0.00066	0.10	0.0926	0.0928	0.0883	0.085 to 0.115	92.6	70 to 130	0.256	20
BA02555 Selenium, Total	mg/L	0.000138	0.00066	0.10	0.0988	0.101	0.105	0.085 to 0.115	98.8	70 to 130	1.76	20
BA02555 Cadmium, Total	mg/L	0.00000727	0.0001474	0.10	0.0965	0.0979	0.0973	0.085 to 0.115	96.5	70 to 130	1.41	20
BA02555 Cobalt, Total	mg/L	-0.00000314	0.0001474	0.10	0.100	0.0971	0.0961	0.085 to 0.115	100	70 to 130	3.44	20
BA02555 Mercury, Total by CVAA	mg/L	-0.0000109	0.0005	0.004	0.00414	0.00420	0.00396	0.0034 to 0.0046	103	70 to 130	1.49	20
BA02555 Molybdenum, Total	mg/L	0.00000558	0.0001474	0.10	0.0981	0.0992	0.0934	0.085 to 0.115	98.1	70 to 130	1.13	20
BA02555 Beryllium, Total	mg/L	0.0000453	0.00088	0.10	0.0958	0.0949	0.0962	0.085 to 0.115	95.8	70 to 130	0.982	20
BA02555 Lead, Total	mg/L	0.0000111	0.0001474	0.10	0.101	0.0989	0.0990	0.085 to 0.115	101	70 to 130	1.78	20
BA02555 Barium, Total	mg/L	0.00000799	0.0002	0.10	0.0967	0.0963	0.0917	0.085 to 0.115	96.7	70 to 130	0.395	20
BA02555 Thallium, Total	mg/L	0.0000141	0.0001474	0.10	0.103	0.100	0.0995	0.085 to 0.115	103	70 to 130	2.44	20
BA02555 Arsenic, Total	mg/L	0.0000218	0.0001474	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.188	20
BA02555 Lithium, Total	mg/L	-0.0000191	0.0154	0.20	0.197	0.196	0.201	0.17 to 0.23	98.6	70 to 130	0.628	20
BA02555 Calcium, Total	mg/L	-0.0107	0.1518	5.00	5.12	5.09	5.23	4.25 to 5.75	102	70 to 130	0.504	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



Customer Account: WMWGORGEB Sample Date:

2/5/20 14:00

Customer ID:

Delivery Date:

2/6/20 13:21

Description: Gorgas Gypsum Equipment Blank

Laboratory ID Number: BA02555

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA02551	Solids, Dissolved	mg/L	-2.00	25			3110	53.0	40 to 60			0.115	5
BA02555	Sulfate	mg/L	-0.528	0.50	20.0	18.0	-0.413	18.2	18 to 22	90.0	80 to 120	0.00	20
BA02555	Chloride	mg/L	-0.00614	0.50	10.0	10.3	0.0855	10.4	9 to 11	103	80 to 120	0.00	20
BA02555	Fluoride	mg/L	0.00436	0.05	2.50	2.54	0.00833	2.57	2.25 to 2.75	102	80 to 120	0.00	20

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Expiration: June 30, 2017

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Issued By: State of Florida, Department of Health

U



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

Compound was analyzed, but not detected.

Alabama Pov Lab Field SERVICES	Chain of Ground	of Custoo lwater ral Testing L	·	La	eld Co		•		Outsid		ab ETA	02/04/20	020 09:00	
Reques	sted Complet	e Date Routi	ne					Re	sults To	Dustin Br	ooks Gre	a Dver		T
reque	Site Represe							1	ested By			9 0 / c.		┪
	_	llector Anth						1 ^	ocation					┨
		niector Antii	OH	, Goggins				<u> </u>	Ocation	Gorgas	Gypsui			_
Bottles	1 Metals	500 mL	3	TDS	50	00 m	L	5 N/A	1	N/A] 7 N/A	\	N/A	
	2 Hg	250 mL	4	Anions	25	50 m	L[6 N/A	1	N/A	8 N/A		N/A	
	Comments													
	Bottle Lab													
	Sample #	Date		Time	Cou			Desc	ription		Filter	Lab I	d	
F	·B-1	2/3/20		12:18	4	_	Field E		777 77011		2 22002	BA022		
<u> </u>	 /IW-1L	02/03/20/	20	12:18	4	\dashv		dwater			 	BA022		
-					-	\dashv								
<u> </u>	1W-2L	02/03/202		13:30	4	\dashv	Ground					BA0228		
-	MW-2LDUP 02/03/2020 13:30							e Duplic	ate			BA0228		
-	MW-3L 02/03/2020 14:50						Ground				BA0229			
IN	MW-4L 02/03/2020 16:10						Ground	dwater		_		BA0229	<i>3</i> 1	
_						\dashv								
L						\dashv								
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	Relin	quished By		•	·			Rece	ived By			Date	:/Time	_
	a	of Got						Laura	Molek			02/04/20	020 09:15	
		<i>V W</i>							80					†
Sn	narTroll ID	7586-41442-5	5-1				Allı	metals a	and radio	ological l	oottles l	nave pH <	< 2	_
T	urbidity ID	5160-26211-1	-1					Coole	r Temp	0.4 degre	es C			
Sa	mple Event	1257					Th	ermom	eter ID	5408-275	568-2-2			

Page 72 of 75

pH Strip ID 7453-40656-10-8

7.1

Alabama Pow	Chain of Custody Field Complete Field Groundwater APC General Testing Laboratory Field Complete Lab Complete Lab ETA O2/06/2020 09:00													
						1 2 1				1				
Reques	sted Complete I					Results			g Dyer					
	Site Representa					Requested	· 							
	Colle	ctor TJ Da	ugherty			Locat	ion Gorgas	Gypsun	n					
Bottles	1 Metals	500 mL	3 TDS	500 n	nL	5 N/A	N/A	7 N/A	N/	A				
	2 Hg	250 mL	4 Anions	250 n	nL	6 N/A	N/A	8 N/A	N/A	4				
Comments														
	Bottle Lab													
	Sample # Date Time Count Description Filter Lab Id													
Ν	NW-3V	2/3/20	14:25	4	Groun	dwater			BA02543					
Ν	1W-3	02/03/2020	15:42	4	Groun	dwater			BA02544					
M	1W-4V	02/03/2020	16:54	4	Groun	dwater			BA02545					
M	1W-4	02/04/2020	09:55	4	Groun	dwater			BA02546					
M	1W-4 Dup	02/04/2020	09:55	4	Sampl	e Duplicate			BA02547					
М	IW-12H	02/04/2020	11:12	4	Groun	dwater			BA02548					
N	1W-11H	02/04/2020	12:40	4	Groun	dwater	_		BA02549					
M	1W-13H	02/04/2020	13:35	4	Groun	dwater			BA02550					
N	1W-9H	02/04/2020	14:48	4	Groun	dwater			BA02551					
N	1W-8	02/04/2020	16:35	4	Groun	dwater			BA02552					
F	B-2	02/04/2020	17:00	4	Field E	- 3lank			BA02553					
M	1W-8V	02/05/2020	13:23	4	Groun	dwater			BA02554					
E	B-1	02/05/2020	14:00	4	Equipr	ment Blank			BA02555					
							_							
	Relinqu	ished By			•	Received	Ву		Date/Ti	me				
	N	Mr.				Received X	H		02/06/2020	08:25				
0	T 11 ID		_		A 11	. 1 1	1. 1 . 1.1	1 1	II. O					

SmarTroll ID | 7586-41444-5-3 Turbidity ID | 4677-23343-4-2 Sample Event | 1257

All metals and radiological bottles have pH < 2 **✓**

Cooler Temp | 1.5 degrees C Thermometer ID 5408-27568-2-2 pH Strip ID 7901-43572-2-1

Chain of Custody Field Field SERVICES APC General Testing Laboratory Field Complete Lab Complete APC General Testing Laboratory	✓ Outside Lab
Requested Complete Date Routine	Results To Dustin

I ab ETA 02/04/2020 09:00

	APC General Testing Laboratory Lab ETA 02/04/2020 09:00																		
Reques	Requested Complete Date Routine											Results To Dustin Brooks, Greg Dyer							
	Site Repr	resent	ative Joh	n P	ate	!				[[Reques	ted By	Greg Dy	er					
		Colle	ector Ant	ho	ny (Goggins					Lo	cation	Gorgas	Gyp	sum				
Bottles	1 Radium	<u> </u>	1 L	٦١	3	N/A		N/A		5	N/A		N/A	7	N/A		N/A		
2000200	2 N/A		N/A	1	4	N/A		N/A		6	N/A		N/A	8	N/A		N/A	T	
	C = === == = = = = = = = = = = = = = =			_														=	
	Comme																		
					Ŧ		_	1						.	, [_	
	Cample	~ #	Date			Time		ottle ount			Doggr	intion		La Fil		Lab I	.a		
	Sample B-1	<i>t</i> #	2/3/20			12:18	C	1	Field	Rla	Descr	ірпоп		ΓII	tei	BA022			
<u> </u>	MW-1L 02/03/2020 12:28							<u>'</u> 1	Grou						\dashv	BA022			
⊢	MW-2L 02/03/2020 13:30							1	Grou						\dashv	BA022			
-	MW-2LDUP 02/03/2020 13:30							1			Duplica	 te			+	BA022			
⊢	1W-3L		02/03/20		\rightarrow	14:50		1	Grou						7	BA022			
<u> </u>	MW-4L 02/03/2020 16:10							1	Grou	ndw	ater				\neg	BA022	97		
	52.55.2525 10.10																		
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	Re	elingu	ished By								Receiv	ed By				Date	e/Time		
		adj									Rauld 9	Marse				02/04/2	020 09:15		
	Const of						╟					way.			\dashv	02,01,2			
																		_	
																	_		
SmarTroll ID 7586-41442-5-1							All metals and radiological bottles have pH < 2						< 2 🔽						
	urbidity I		60-26211-	1-1	1		_				Cooler	_	N/A						
Sa	Sample Event 1257								T	her	mome		N/A						
											pH Str	rip ID	7453-406	56-1	0-8				

📤 Alabama Power	
≥ ab&	Chain of Custody
Field	Chain of Custody Groundwater
	APC General Testing Labora

✓ Field Complete ✓ Lab Complete

Outside	Lab

APC General Testing Laboratory Lab ETA 02/06/2020 09:00												
Reque	ested Complete	Date Routine				Results 7	o Dustin B	Brooks, Greg	 g Dyer			
_	Site Represent	ative John Pa	te			Requested F	By Greg Dy	yer				
	-	ector TJ Dau	gherty			Locatio	n Gorgas	Gypsum	<u> </u>			
Bottles	1 Radium	1 L 3	N/A	N/A		5 N/A	N/A	7 N/A	N/A			
Dotties	2 N/A	N/A 4	l N/A	N/A		6 N/A	N/A	8 N/A				
							1.4//					
	Comments R	adium MS/MSD co	ollected @ M\	W-12H								
	Doutle Tale											
	C 1 . #	Ditt	TT*	Bottle		December		Lab	T .1. T.1			
	Sample # MW-3V	Date	Time	Count	Group	Description dwater	n	Filter	Lab Id BA02556			
 		2/3/20	14:25	1	<u> </u>	dwater dwater		+	BA02557			
⊢	MW-3		15:42	1	<u> </u>			++				
⊢	MW-4V MW-4	02/03/2020	16:54	1	-	dwater dwater		+	BA02558 BA02559	+		
⊢	MW-4 Dup	02/04/2020	09:55	1		e Duplicate		+ +	BA02560	-		
⊢	ww-4 Dup MW-12H	02/04/2020	09:55	1		dwater		+	BA02561			
⊢	MW-11H	02/04/2020	11:12	3	 	dwater	+	BA02562				
⊢	MW-13H	02/04/2020	12:40	1	 	dwater		+	BA02563			
⊢	MW-9H	02/04/2020	13:35	1	<u> </u>	dwater dwater		+	BA02564			
⊢	MW-8	02/04/2020	14:48	 	<u> </u>	dwater dwater		+ +	BA02565			
l ⊢	=B-2	02/04/2020	16:35	1	Field E			+	BA02566			
⊢	MW-8V	02/05/2020	17:00	1	-	dwater		+	BA02567			
⊢	======================================	02/05/2020	13:23	1		ment Blank		+	BA02568			
<u> </u>	_D-1	02/03/2020	14:00	1	Lquipi	TICHT DIAM		+	DA02300			
-								+				
_								+				
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L		<u> </u>	<u> </u>	<u> </u>								
	Relinqu	iished By				Received B	•		Date/Tin	ne		
	<i>\$</i>	M				Xwa 12/1	7		02/06/2020 (08:25		
				┨├──								
							1. 1					
	-	86-41444-5-3			All	metals and rac		bottles h	have pH < 2	<u>~</u>		
	· · ·	577-23343-4-2		\dashv		Cooler Tem	`					
Sa	ample Event 12	:5 <i>/</i>										
1				pH Strip ID 7901-43572-2-1								



Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 400-183738-1

Laboratory Sample Delivery Group: Gorgas Gypsum 1257

Client Project/Site: CCR Plant Gorgas

For:

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

Attn: Laura Midkiff

CheyrindxWhitmin

Authorized for release by: 3/10/2020 5:07:24 PM

Cheyenne Whitmire, Project Manager II (850)471-6222

cheyenne.whitmire@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Job ID: 400-183738-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative 400-183738-1

RAD

Method 9315: Radium-226 Prep Batch 160-460256. 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. BA02292 FB-1 (400-183738-1), BA02293 MW-1L (400-183738-2). BA02294 MW-2L (400-183738-3). BA02295 MW-2L DUP (400-183738-4). BA02296 MW-3L (400-183738-5). BA02297 MW-4L (400-183738-6), BA02556 MW-3V (400-183738-7), BA02557 MW-3 (400-183738-8), BA02558 MW-4V (400-183738-9), BA02559 MW-4 (400-183738-10), BA02560 MW-4 DUP (400-183738-11), BA02561 MW-12H (400-183738-12), BA02561 MW-12H (400-183738-12[MS]), BA02561 MW-12H (400-183738-12[MSD]), BA02562 MW-11H (400-183738-13), BA02563 MW-13H (400-183738-14), BA02564 MW-9H (400-183738-15), BA02565 MW-8 (400-183738-16), BA02566 FB-2 (400-183738-17), BA02567 MW-8V (400-183738-18), BA02568 EB-1 (400-183738-19), (LCS 160-460256/1-A) and (MB 160-460256/23-A)

Method 9320: Radium-228 Prep Batch 160-460265. 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. BA02292 FB-1 (400-183738-1), BA02293 MW-1L (400-183738-2), BA02294 MW-2L (400-183738-3), BA02295 MW-2L DUP (400-183738-4), BA02296 MW-3L (400-183738-5), BA02297 MW-4L (400-183738-6), BA02556 MW-3V (400-183738-7), BA02557 MW-3 (400-183738-8), BA02558 MW-4V (400-183738-9), BA02559 MW-4 (400-183738-10), BA02560 MW-4 DUP (400-183738-11), BA02561 MW-12H (400-183738-12), BA02561 MW-12H (400-183738-12[MS]), BA02561 MW-12H (400-183738-12[MSD]), BA02562 MW-11H (400-183738-13), BA02563 MW-13H (400-183738-14), BA02564 MW-9H (400-183738-15), BA02565 MW-8 (400-183738-16), BA02566 FB-2 (400-183738-17), BA02567 MW-8V (400-183738-18), BA02568 EB-1 (400-183738-19), (LCS 160-460265/1-A) and (MB 160-460265/23-A)

Method PrecSep 0: Radium 228 Prep Batch 160-460265. The following samples were prepared at a reduced aliquot due to limited volume: BA02292 FB-1 (400-183738-1), BA02293 MW-1L (400-183738-2), BA02294 MW-2L (400-183738-3), BA02295 MW-2L DUP (400-183738-4), BA02296 MW-3L (400-183738-5), BA02297 MW-4L (400-183738-6), BA02556 MW-3V (400-183738-7), BA02557 MW-3 (400-183738-8), BA02558 MW-4V (400-183738-9), BA02559 MW-4 (400-183738-10), BA02560 MW-4 DUP (400-183738-11), BA02561 MW-12H (400-183738-12), BA02561 MW-12H (400-183738-12[MS]), BA02561 MW-12H (400-183738-12[MSD]), BA02562 MW-11H (400-183738-13), BA02563 MW-13H (400-183738-14), BA02564 MW-9H (400-183738-15), BA02565 MW-8 (400-183738-16), BA02566 FB-2 (400-183738-17), BA02567 MW-8V (400-183738-18) and BA02568 EB-1 (400-183738-19).

Method PrecSep-21: Radium 226 Prep Batch 160-460256. The following samples were prepared at a reduced aliquot due to limited volume: BA02292 FB-1 (400-183738-1), BA02293 MW-1L (400-183738-2), BA02294 MW-2L (400-183738-3), BA02295 MW-2L DUP (400-183738-4), BA02296 MW-3L (400-183738-5), BA02297 MW-4L (400-183738-6), BA02556 MW-3V (400-183738-7), BA02557 MW-3 (400-183738-8), BA02558 MW-4V (400-183738-9), BA02559 MW-4 (400-183738-10), BA02560 MW-4 DUP (400-183738-11), BA02561 MW-12H (400-183738-12), BA02561 MW-12H (400-183738-12[MS]), BA02561 MW-12H (400-183738-12[MSD]), BA02562 MW-11H (400-183738-13), BA02563 MW-13H (400-183738-14), BA02564 MW-9H (400-183738-15), BA02565 MW-8 (400-183738-16), BA02566 FB-2 (400-183738-17), BA02567 MW-8V (400-183738-18) and BA02568 EB-1 (400-183738-19).

Method Summary

Client: Alabama Power General Test Laboratory

Project/Site: CCR Plant Gorgas

Job ID: 400-183738-1 SDG: Gorgas Gypsum 1257

9

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

Eurofins TestAmerica, Pensacola

Sample Summary

Client: Alabama Power General Test Laboratory

Project/Site: CCR Plant Gorgas

Job ID: 400-183738-1
SDG: Gorgas Gypsum 1257

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset
400-183738-1	BA02292 FB-1	Water	02/03/20 12:18	02/10/20 14:08	
400-183738-2	BA02293 MW-1L	Water	02/03/20 12:28	02/10/20 14:08	
400-183738-3	BA02294 MW-2L	Water	02/03/20 13:30	02/10/20 14:08	
400-183738-4	BA02295 MW-2L DUP	Water	02/03/20 13:30	02/10/20 14:08	
400-183738-5	BA02296 MW-3L	Water	02/03/20 14:50	02/10/20 14:08	
400-183738-6	BA02297 MW-4L	Water	02/03/20 16:10	02/10/20 14:08	
400-183738-7	BA02556 MW-3V	Water	02/03/20 14:25	02/10/20 14:08	
400-183738-8	BA02557 MW-3	Water	02/03/20 15:42	02/10/20 14:08	
400-183738-9	BA02558 MW-4V	Water	02/03/20 16:54	02/10/20 14:08	
400-183738-10	BA02559 MW-4	Water	02/04/20 09:55	02/10/20 14:08	
400-183738-11	BA02560 MW-4 DUP	Water	02/04/20 09:55	02/10/20 14:08	
400-183738-12	BA02561 MW-12H	Water	02/04/20 11:12	02/10/20 14:08	
400-183738-13	BA02562 MW-11H	Water	02/04/20 12:40	02/10/20 14:08	
400-183738-14	BA02563 MW-13H	Water	02/04/20 13:35	02/10/20 14:08	
400-183738-15	BA02564 MW-9H	Water	02/04/20 14:48	02/10/20 14:08	
400-183738-16	BA02565 MW-8	Water	02/04/20 16:35	02/10/20 14:08	
400-183738-17	BA02566 FB-2	Water	02/04/20 17:00	02/10/20 14:08	
400-183738-18	BA02567 MW-8V	Water	02/05/20 13:23	02/10/20 14:08	
400-183738-19	BA02568 EB-1	Water	02/05/20 14:00	02/10/20 14:08	

5

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7

10

11

12

11:

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02292 FB-1

Lab Sample ID: 400-183738-1 Date Collected: 02/03/20 12:18 **Matrix: Water** Date Received: 02/10/20 14:08

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.127		0.0475	0.0488	1.00	0.163		02/13/20 06:48		1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					02/13/20 06:48	03/06/20 09:59	1

Method: 9320 - 1	Radium-228 (GFPC)	Count	Total						
			Uncert.	Uncert.				_		
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.123	U	0.295	0.295	1.00	0.507	pCi/L	02/13/20 07:22	02/26/20 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					02/13/20 07:22	02/26/20 17:16	1
Y Carrier	87.1		40 - 110					02/13/20 07:22	02/26/20 17:16	1

Method: Ra226 Ra	228 - Combin	ned Radiu	m-226 a	nd Radiun	n-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result Qua		(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.00470 U		0.299	0.299	5.00	0.507	pCi/L		03/10/20 07:34	1

3/10/2020

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02293 MW-1L

Lab Sample ID: 400-183738-2 Date Collected: 02/03/20 12:28 **Matrix: Water** Date Received: 02/10/20 14:08

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0251	U	0.0828	0.0828	1.00	0.155	pCi/L	02/13/20 06:48	03/06/20 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3	-	40 - 110					02/13/20 06:48	03/06/20 09:59	1

Method: 9320 -	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.496	U	0.370	0.372	1.00	0.584	pCi/L	02/13/20 07:22	02/26/20 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					02/13/20 07:22	02/26/20 17:16	1
Y Carrier	86.7		40 - 110					02/13/20 07:22	02/26/20 17:16	1

Method: Ra226 Ra2	228 - Con	nbined Ra	dium-226 a	nd Radiun	1-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.521	U	0.379	0.381	5.00	0.584	pCi/L		03/10/20 07:34	1

3/10/2020

Client: Alabama Power General Test Laboratory

86.4

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02294 MW-2L

Y Carrier

Lab Sample ID: 400-183738-3 Date Collected: 02/03/20 13:30 **Matrix: Water** Date Received: 02/10/20 14:08

Method: 9315 - R	adium-226 (GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0154	U	0.103	0.103	1.00	0.195	pCi/L	02/13/20 06:48	03/06/20 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					02/13/20 06:48	03/06/20 09:59	1
Method: 9320 - R	adium-228 (GFPC)								
	`	,	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0399	U	0.309	0.309	1.00	0.561	pCi/L	02/13/20 07:22	02/26/20 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					02/13/20 07:22	02/26/20 17:16	

Method: Ra226_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radium	-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0245	U	0.326	0.326	5.00	0.561	pCi/L		03/10/20 07:34	1

40 - 110

3/10/2020

02/13/20 07:22 02/26/20 17:16

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02295 MW-2L DUP

Lab Sample ID: 400-183738-4 Date Collected: 02/03/20 13:30 **Matrix: Water** Date Received: 02/10/20 14:08

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0667		0.0867	0.0869	1.00	0.145				1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		40 - 110					02/13/20 06:48	03/06/20 09:59	1

Analyte	Result	Qualifier	Uncert. (2σ+/-)	1 otal Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.165	U	0.280	0.280	1.00	0.529	pCi/L	02/13/20 07:22	02/26/20 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		40 - 110					02/13/20 07:22	02/26/20 17:16	1
Y Carrier	86.7		40 - 110					02/13/20 07:22	02/26/20 17:16	1

Method: Ra226_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0978	U	0.293	0.293	5.00	0.529	pCi/L	_	03/10/20 07:34	1

3/10/2020

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02296 MW-3L

Date Collected: 02/03/20 14:50 Date Received: 02/10/20 14:08 Lab Sample ID: 400-183738-5

Matrix: Water

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analvzed	Dil Fac
Radium-226	-0.126		0.0764	0.0772	1.00	0.197		02/13/20 06:48		1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6	-	40 - 110					02/13/20 06:48	03/06/20 09:59	1

Method: 9320 - I	Radium-228 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.150	U	0.298	0.298	1.00	0.509	pCi/L	02/13/20 07:22	02/26/20 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					02/13/20 07:22	02/26/20 17:16	1
Y Carrier	85.2		40 - 110					02/13/20 07:22	02/26/20 17:16	1

Method: Ra226 Ra2	228 - Combined	d Radium-226	and Radiur	m-228					
_		Count	Total						
		Uncert.	Uncert.						
Analyte	Result Qualif	ier (2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0246 U	0.308	0.308	5.00	0.509	pCi/L	_	03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02297 MW-4L

Lab Sample ID: 400-183738-6 Date Collected: 02/03/20 16:10 **Matrix: Water** Date Received: 02/10/20 14:08

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analvzed	Dil Fac
Radium-226	0.0627		0.0759	0.0761	1.00	0.124			03/06/20 09:59	1
Naululli-220	0.0027	U	0.0759	0.0701	1.00	0.124	pCi/L	02/13/20 00.40	03/00/20 09.59	!
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					02/13/20 06:48	03/06/20 09:59	

Method: 9320 - 1	Naululli-220 (GI FO)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.191	Ū	0.335	0.335	1.00	0.567	pCi/L	02/13/20 07:22	02/26/20 17:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					02/13/20 07:22	02/26/20 17:16	1
Y Carrier	77.8		40 - 110					02/13/20 07:22	02/26/20 17:16	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.254	U	0.343	0.344	5.00	0.567	pCi/L	_	03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02556 MW-3V

Carrier

Ba Carrier

Y Carrier

Lab Sample ID: 400-183738-7 Date Collected: 02/03/20 14:25 **Matrix: Water** Date Received: 02/10/20 14:08

Method: 9315 - I	Radium-226 (GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0601	U	0.0798	0.0800	1.00	0.134	pCi/L	02/13/20 06:48	03/06/20 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.0		40 - 110					02/13/20 06:48	03/06/20 09:59	1
_ Method: 9320 - I	Radium-228 (GFPC)								
		,	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.348	U	0.338	0.340	1.00	0.548	pCi/L	02/13/20 07:22	02/26/20 17:17	1

Prepared

Analyzed

02/13/20 07:22 02/26/20 17:17

02/13/20 07:22 02/26/20 17:17

Limits

40 - 110

40 - 110

%Yield Qualifier

96.0

83.0

Method: Ra226 Ra2	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.408	U	0.347	0.349	5.00	0.548	pCi/L		03/10/20 07:34	1

Eurofins TestAmerica, Pensacola

3/10/2020

Dil Fac

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02557 MW-3

Lab Sample ID: 400-183738-8 Date Collected: 02/03/20 15:42 **Matrix: Water** Date Received: 02/10/20 14:08

Method: 9315 -	Radium-226 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0150	U	0.0961	0.0961	1.00	0.181	pCi/L	02/13/20 06:48	03/06/20 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					02/13/20 06:48	03/06/20 09:59	1
	Radium-228 ((GFPC)								
		•	Count	Total						

			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.265	U	0.304	0.305	1.00	0.500	pCi/L	02/13/20 07:22	02/26/20 17:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					02/13/20 07:22	02/26/20 17:17	1
Y Carrier	81.9		40 - 110					02/13/20 07:22	02/26/20 17:17	1

Method: Ra226 Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.280	U	0.319	0.320	5.00	0.500	pCi/L		03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02558 MW-4V

Lab Sample ID: 400-183738-9 Date Collected: 02/03/20 16:54 **Matrix: Water** Date Received: 02/10/20 14:08

Method: 9315 - I	Radium-226 (GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0269	U	0.0795	0.0795	1.00	0.148	pCi/L	02/13/20 06:48	03/06/20 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
			10 110					00/40/00 00:40	02/06/20 00:50	
Ba Carrier Method: 9320 - I	93.2 Radium-228 ((GFPC)	40 - 110					02/13/20 06:48	03/06/20 09:59	1
Ba Carner Method: 9320 - I		(GFPC)	Count	Total Uncert.				02/13/20 06.48	03/06/20 09.59	7
-	Radium-228 ((GFPC) Qualifier		Total Uncert. (2σ+/-)	RL	MDC	Unit	02/13/20 06:48	Analyzed	Dil Fac
Method: 9320 - I	Radium-228 (•	Count Uncert.	Uncert.	RL 1.00		Unit pCi/L			Dil Fac
Method: 9320 - I	Radium-228 (Result 0.731	Qualifier	Count Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Analyzed	Dil Fac 1 Dil Fac
Method: 9320 - I	Radium-228 (Result 0.731	Qualifier	Count Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared 02/13/20 07:22	Analyzed 02/26/20 17:17	1

Method: Ra226_Ra	228 - Combined I	Radium-226 a	ınd Radium	1-228					
		Count	Total						
		Uncert.	Uncert.						
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.758	0.363	0.370	5.00	0.512	pCi/L		03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02559 MW-4

Lab Sample ID: 400-183738-10 Date Collected: 02/04/20 09:55 **Matrix: Water** Date Received: 02/10/20 14:08

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0685	U	0.0968	0.0970	1.00	0.164	pCi/L	02/13/20 06:48	03/06/20 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.2		40 - 110					02/13/20 06:48	03/06/20 09:59	1

Method: 9320 - I	Radium-228 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.256	U	0.348	0.349	1.00	0.580	pCi/L	02/13/20 07:22	02/26/20 17:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.2	-	40 - 110					02/13/20 07:22	02/26/20 17:17	1
Y Carrier	86.0		40 - 110					02/13/20 07:22	02/26/20 17:17	1

_ Method: Ra226 Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.324	U	0.361	0.362	5.00	0.580	pCi/L	_	03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02560 MW-4 DUP

Lab Sample ID: 400-183738-11 Date Collected: 02/04/20 09:55 **Matrix: Water** Date Received: 02/10/20 14:08

Method: 9315 - I	Radium-226 (GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0521	U	0.0869	0.0870	1.00	0.193	pCi/L	02/13/20 06:48	03/06/20 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					02/13/20 06:48	03/06/20 09:59	1
Method: 9320 - I	Radium-228 (GFPC)	Count	Total						

MCt1104: 3020 - 1		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.721		0.366	0.372	1.00	0.542	pCi/L	02/13/20 07:22	02/26/20 17:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					02/13/20 07:22	02/26/20 17:17	1
Y Carrier	89.3		40 - 110					02/13/20 07:22	02/26/20 17:17	1

Method: Ra226_Ra	228 - Combined	Radium-226 a	ınd Radiun	า-228					
		Count	Total						
		Uncert.	Uncert.						
Analyte	Result Qualifie	r (2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.669	0.376	0.382	5.00	0.542	pCi/L		03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02561 MW-12H

Lab Sample ID: 400-183738-12 Date Collected: 02/04/20 11:12 **Matrix: Water**

Date Received: 02/10/20 14:08		
	Count	Total

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.299		0.128	0.131	1.00	0.146	pCi/L	02/13/20 06:48	03/06/20 10:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		40 - 110					02/13/20 06:48	03/06/20 10:00	1

Method: 9320 - F	(aululii-220 ((GFFC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.641		0.329	0.334	1.00	0.477	pCi/L	02/13/20 07:22	02/26/20 17:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		40 - 110					02/13/20 07:22	02/26/20 17:17	1
Y Carrier	85.6		40 - 110					02/13/20 07:22	02/26/20 17:17	1

Method: Ra226_Ra	228 - Con	ibined Rad	dium-226 a	nd Radium	-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.939		0.353	0.359	5.00	0.477	pCi/L		03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02562 MW-11H

Lab Sample ID: 400-183738-13 Date Collected: 02/04/20 12:40 **Matrix: Water** Date Received: 02/10/20 14:08

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0577	U	0.0731	0.0733	1.00	0.171	pCi/L	02/13/20 06:48	03/06/20 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		40 - 110					02/13/20 06:48	03/06/20 11:51	1

Radium-228 (GFPC)								
		Count	Total						
		Uncert.	Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.377	U	0.417	0.418	1.00	0.684	pCi/L	02/13/20 07:22	02/26/20 17:20	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
94.5		40 - 110					02/13/20 07:22	02/26/20 17:20	1
87.9		40 - 110					02/13/20 07:22	02/26/20 17:20	1
	Result 0.377		Count Uncert. (2σ+/-) 0.377 U 0.417	Count Uncert. Uncert. Uncert. (2σ+/-) (2σ+/-)	Count Uncert. Uncert. Count Uncert. Cou	Count Uncert. Uncert. Count Uncert. Cou	Count Uncert. Uncert. Count Uncert. Cou	Count Uncert. Uncert. Count Uncert. Cou	Count Uncert. Uncert.

Method: Ra226_Ra2	228 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.319	U	0.423	0.424	5.00	0.684	pCi/L	_	03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02563 MW-13H

Lab Sample ID: 400-183738-14 Date Collected: 02/04/20 13:35 **Matrix: Water** Date Received: 02/10/20 14:08

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0349	Ū	0.0856	0.0856	1.00	0.156	pCi/L	02/13/20 06:48	03/06/20 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					02/13/20 06:48	03/06/20 11:51	1

Method: 9320 - I	Radium-228 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.589	U	0.392	0.396	1.00	0.610	pCi/L	02/13/20 07:22	02/26/20 17:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					02/13/20 07:22	02/26/20 17:20	1
Y Carrier	87.5		40 - 110					02/13/20 07:22	02/26/20 17:20	1

Method: Ra226_Ra	228 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.624		0.401	0.405	5.00	0.610	pCi/L	_	03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02564 MW-9H

Lab Sample ID: 400-183738-15 Date Collected: 02/04/20 14:48 **Matrix: Water** Date Received: 02/10/20 14:08

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0144	U	0.0906	0.0906	1.00	0.183	pCi/L	02/13/20 06:48	03/06/20 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110					02/13/20 06:48	03/06/20 11:51	1

	·		Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.456	U	0.397	0.399	1.00	0.639	pCi/L	02/13/20 07:22	02/26/20 17:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110					02/13/20 07:22	02/26/20 17:20	1
Y Carrier	87.9		40 - 110					02/13/20 07:22	02/26/20 17:20	1

Method: Ra226 Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.441	Ū	0.407	0.409	5.00	0.639	pCi/L	_	03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02565 MW-8

Date Received: 02/10/20 14:08

Lab Sample ID: 400-183738-16 Date Collected: 02/04/20 16:35

Matrix: Water

Method: 9315 - I	Radium-226 ((GFPC)								
	·		Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0585	U	0.0865	0.0866	1.00	0.148	pCi/L	02/13/20 06:48	03/06/20 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		40 - 110					02/13/20 06:48	03/06/20 11:51	1

Method: 9320 - I	Radium-228 ((GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.277	U	0.410	0.411	1.00	0.685	pCi/L	02/13/20 07:22	02/26/20 17:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		40 - 110					02/13/20 07:22	02/26/20 17:21	1
Y Carrier	86.7		40 - 110					02/13/20 07:22	02/26/20 17:21	1

Method: Ra226 Ra2	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.336	Ū	0.419	0.420	5.00	0.685	pCi/L	_	03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02566 FB-2

Lab Sample ID: 400-183738-17 Date Collected: 02/04/20 17:00 **Matrix: Water** Date Received: 02/10/20 14:08

Method:	9315 -	Radium-226	(GFPC)

Miction. 3010 - 1		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.115	U	0.0773	0.0780	1.00	0.194	pCi/L	02/13/20 06:48	03/06/20 11:51	1
Carrier Ba Carrier		Qualifier	Limits 40 - 110					Prepared 02/13/20 06:48	Analyzed 03/06/20 11:51	Dil Fac

Method:	9320 -	Radium-228	(GFPC)
mothoa	0020	Madiani 220	(00)

Metriod: 3320 - Rai		, ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0239	Ū	0.329	0.329	1.00	0.590	pCi/L	02/13/20 07:22	02/26/20 17:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					02/13/20 07:22	02/26/20 17:21	1
Y Carrier	83.0		40 - 110					02/13/20 07:22	02/26/20 17:21	1

Method: Ra226 Ra228 - Combined Radium-226 and Radium-228

RL MDG	Unit	Prepared	Analyzed	Dil Fac
0.590	pCi/L		03/10/20 07:34	1

Client: Alabama Power General Test Laboratory

0.345 U

97.8

86.4

%Yield Qualifier

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02567 MW-8V

Radium-228

Carrier

Ba Carrier

Y Carrier

226 + 228

Lab Sample ID: 400-183738-18 Date Collected: 02/05/20 13:23 **Matrix: Water** Date Received: 02/10/20 14:08

Method: 9315 - I	Radium-226 (GFPC)								
Analyte		Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.230		0.110	0.112	1.00	0.125	pCi/L	02/13/20 06:48	03/06/20 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.8		40 - 110					02/13/20 06:48	03/06/20 11:51	1
- Method: 9320 - I	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac

Method: Ra226 Ra	228 - Com	nbined Ra	dium-226 a	nd Radium	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium	0.576		0.355	0.358	5.00	0.549	nCi/l	_	03/10/20 07:34	

0.340

1.00

0.549 pCi/L

02/13/20 07:22 02/26/20 17:21

02/13/20 07:22 02/26/20 17:21

02/13/20 07:22 02/26/20 17:21

Analyzed

Prepared

0.338

Limits

40 - 110

40 - 110

Dil Fac

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02568 EB-1

Lab Sample ID: 400-183738-19 Date Collected: 02/05/20 14:00 **Matrix: Water** Date Received: 02/10/20 14:08

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0149	U	0.0589	0.0589	1.00	0.132	pCi/L	02/13/20 06:48	03/06/20 11:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					02/13/20 06:48	03/06/20 11:51	1

Method: 9320 - Ra	idium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0633	U	0.356	0.356	1.00	0.622	pCi/L	02/13/20 07:22	02/26/20 17:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					02/13/20 07:22	02/26/20 17:21	1
Y Carrier	84.1		40 - 110					02/13/20 07:22	02/26/20 17:21	1

Method: Ra226 Ra	228 - Combined Ra	ndium-226 a	nd Radiun	1-228					
_		Count	Total						
		Uncert.	Uncert.						
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0485 U	0.361	0.361	5.00	0.622	pCi/L	_	03/10/20 07:34	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Qualifiers

R	a	d

Qualifier **Qualifier Description**

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**

Detection Limit (DoD/DOE) DΙ

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)

Estimated Detection Limit (Dioxin) **EDL** Limit of Detection (DoD/DOE) LOD Limit of Quantitation (DoD/DOE) LOQ

Minimum Detectable Activity (Radiochemistry) MDA Minimum Detectable Concentration (Radiochemistry) MDC

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**

Relative Error Ratio (Radiochemistry) **RER**

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

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02292 FB-1

Lab Sample ID: 400-183738-1 Date Collected: 02/03/20 12:18 **Matrix: Water** Date Received: 02/10/20 14:08

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:16	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02293 MW-1L

Lab Sample ID: 400-183738-2 Date Collected: 02/03/20 12:28 **Matrix: Water**

Date Received: 02/10/20 14:08

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:16	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02294 MW-2L

Lab Sample ID: 400-183738-3 Date Collected: 02/03/20 13:30 **Matrix: Water** Date Received: 02/10/20 14:08

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:16	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02295 MW-2L DUP

Lab Sample ID: 400-183738-4 Date Collected: 02/03/20 13:30 **Matrix: Water** Date Received: 02/10/20 14:08

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:16	KLS	TAL SL
Total/NA	Analysis	Ra226 Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

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Lab Chronicle

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02296 MW-3L

Lab Sample ID: 400-183738-5 Date Collected: 02/03/20 14:50 **Matrix: Water** Date Received: 02/10/20 14:08

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:16	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02297 MW-4L

Lab Sample ID: 400-183738-6 Date Collected: 02/03/20 16:10 **Matrix: Water** Date Received: 02/10/20 14:08

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:16	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02556 MW-3V

Lab Sample ID: 400-183738-7 Date Collected: 02/03/20 14:25 **Matrix: Water** Date Received: 02/10/20 14:08

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:17	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02557 MW-3

Lab Sample ID: 400-183738-8 Date Collected: 02/03/20 15:42 **Matrix: Water** Date Received: 02/10/20 14:08

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:17	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

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Job ID: 400-183738-1

Client: Alabama Power General Test Laboratory Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02558 MW-4V

Date Collected: 02/03/20 16:54 Date Received: 02/10/20 14:08

Lab Sample ID: 400-183738-9

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:17	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Lab Sample ID: 400-183738-10 Client Sample ID: BA02559 MW-4

Date Collected: 02/04/20 09:55 Date Received: 02/10/20 14:08

Matrix: Water

Batch Batch Dilution Batch Prepared **Prep Type** Type Method Run **Factor** Number or Analyzed Analyst Lab Total/NA Prep PrecSep-21 460256 02/13/20 06:48 RBR TAL SL Total/NA Analysis 9315 463404 03/06/20 09:59 AJD TAL SL Total/NA Prep PrecSep_0 460265 02/13/20 07:22 RBR TAL SL 461941 02/26/20 17:17 KLS Total/NA Analysis 9320 TAL SL 1 Total/NA Analysis Ra226 Ra228 1 463533 03/10/20 07:34 SMP TAL SL

Client Sample ID: BA02560 MW-4 DUP Lab Sample ID: 400-183738-11

Date Collected: 02/04/20 09:55 Date Received: 02/10/20 14:08

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 09:59	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:17	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02561 MW-12H

Date Collected: 02/04/20 11:12 Date Received: 02/10/20 14:08

Lab Sample ID: 400-183738-12 **Matrix: Water**

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 10:00	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461941	02/26/20 17:17	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

3/10/2020

Client Sample ID: BA02562 MW-11H

Client: Alabama Power General Test Laboratory

Date Collected: 02/04/20 12:40 Date Received: 02/10/20 14:08

Project/Site: CCR Plant Gorgas

Lab Sample ID: 400-183738-13

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 11:51	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461940	02/26/20 17:20	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02563 MW-13H

Date Collected: 02/04/20 13:35 Date Received: 02/10/20 14:08

Lab Sample ID: 400-183738-14

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21	 -		460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 11:51	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461940	02/26/20 17:20	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Lab Sample ID: 400-183738-15 Client Sample ID: BA02564 MW-9H Date Collected: 02/04/20 14:48

Date Received: 02/10/20 14:08

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 11:51	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461940	02/26/20 17:20	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Lab Sample ID: 400-183738-16 Client Sample ID: BA02565 MW-8 **Matrix: Water**

Date Collected: 02/04/20 16:35 Date Received: 02/10/20 14:08

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 11:51	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461940	02/26/20 17:21	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Client Sample ID: BA02566 FB-2

Lab Sample ID: 400-183738-17 Date Collected: 02/04/20 17:00 **Matrix: Water** Date Received: 02/10/20 14:08

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 11:51	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461940	02/26/20 17:21	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02567 MW-8V

Lab Sample ID: 400-183738-18 Date Collected: 02/05/20 13:23 **Matrix: Water** Date Received: 02/10/20 14:08

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 11:51	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461940	02/26/20 17:21	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Client Sample ID: BA02568 EB-1

Lab Sample ID: 400-183738-19 Date Collected: 02/05/20 14:00 **Matrix: Water** Date Received: 02/10/20 14:08

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			460256	02/13/20 06:48	RBR	TAL SL
Total/NA	Analysis	9315		1	463404	03/06/20 11:51	AJD	TAL SL
Total/NA	Prep	PrecSep_0			460265	02/13/20 07:22	RBR	TAL SL
Total/NA	Analysis	9320		1	461940	02/26/20 17:21	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	463533	03/10/20 07:34	SMP	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Eurofins TestAmerica, Pensacola

QC Association Summary

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 SDG: Gorgas Gypsum 1257 Project/Site: CCR Plant Gorgas

Rad

Prep Batch: 460256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183738-1	BA02292 FB-1	Total/NA	Water	PrecSep-21	
400-183738-2	BA02293 MW-1L	Total/NA	Water	PrecSep-21	
400-183738-3	BA02294 MW-2L	Total/NA	Water	PrecSep-21	
400-183738-4	BA02295 MW-2L DUP	Total/NA	Water	PrecSep-21	
400-183738-5	BA02296 MW-3L	Total/NA	Water	PrecSep-21	
400-183738-6	BA02297 MW-4L	Total/NA	Water	PrecSep-21	
400-183738-7	BA02556 MW-3V	Total/NA	Water	PrecSep-21	
400-183738-8	BA02557 MW-3	Total/NA	Water	PrecSep-21	
400-183738-9	BA02558 MW-4V	Total/NA	Water	PrecSep-21	
400-183738-10	BA02559 MW-4	Total/NA	Water	PrecSep-21	
400-183738-11	BA02560 MW-4 DUP	Total/NA	Water	PrecSep-21	
400-183738-12	BA02561 MW-12H	Total/NA	Water	PrecSep-21	
400-183738-13	BA02562 MW-11H	Total/NA	Water	PrecSep-21	
400-183738-14	BA02563 MW-13H	Total/NA	Water	PrecSep-21	
400-183738-15	BA02564 MW-9H	Total/NA	Water	PrecSep-21	
400-183738-16	BA02565 MW-8	Total/NA	Water	PrecSep-21	
400-183738-17	BA02566 FB-2	Total/NA	Water	PrecSep-21	
400-183738-18	BA02567 MW-8V	Total/NA	Water	PrecSep-21	
400-183738-19	BA02568 EB-1	Total/NA	Water	PrecSep-21	
MB 160-460256/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-460256/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-183738-12 MS	BA02561 MW-12H	Total/NA	Water	PrecSep-21	
400-183738-12 MSD	BA02561 MW-12H	Total/NA	Water	PrecSep-21	

Prep Batch: 460265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
400-183738-1	BA02292 FB-1	Total/NA	Water	PrecSep_0	_
400-183738-2	BA02293 MW-1L	Total/NA	Water	PrecSep_0	
400-183738-3	BA02294 MW-2L	Total/NA	Water	PrecSep_0	
400-183738-4	BA02295 MW-2L DUP	Total/NA	Water	PrecSep_0	
400-183738-5	BA02296 MW-3L	Total/NA	Water	PrecSep_0	
400-183738-6	BA02297 MW-4L	Total/NA	Water	PrecSep_0	
400-183738-7	BA02556 MW-3V	Total/NA	Water	PrecSep_0	
400-183738-8	BA02557 MW-3	Total/NA	Water	PrecSep_0	
400-183738-9	BA02558 MW-4V	Total/NA	Water	PrecSep_0	
00-183738-10	BA02559 MW-4	Total/NA	Water	PrecSep_0	
100-183738-11	BA02560 MW-4 DUP	Total/NA	Water	PrecSep_0	
100-183738-12	BA02561 MW-12H	Total/NA	Water	PrecSep_0	
100-183738-13	BA02562 MW-11H	Total/NA	Water	PrecSep_0	
100-183738-14	BA02563 MW-13H	Total/NA	Water	PrecSep_0	
400-183738-15	BA02564 MW-9H	Total/NA	Water	PrecSep_0	
100-183738-16	BA02565 MW-8	Total/NA	Water	PrecSep_0	
400-183738-17	BA02566 FB-2	Total/NA	Water	PrecSep_0	
400-183738-18	BA02567 MW-8V	Total/NA	Water	PrecSep_0	
400-183738-19	BA02568 EB-1	Total/NA	Water	PrecSep_0	
MB 160-460265/23-A	Method Blank	Total/NA	Water	PrecSep_0	
_CS 160-460265/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-183738-12 MS	BA02561 MW-12H	Total/NA	Water	PrecSep_0	
400-183738-12 MSD	BA02561 MW-12H	Total/NA	Water	PrecSep_0	

Eurofins TestAmerica, Pensacola

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-460256/23-A

Lab Sample ID: LCS 160-460256/1-A

Matrix: Water

Analysis Batch: 463404

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 460256

MB MB Uncert. Uncert. Analyte Result Qualifier RL MDC Unit $(2\sigma + / -)$ $(2\sigma + / -)$ Prepared Analyzed Dil Fac Radium-226 -0.02354 U 0.190 pCi/L 02/13/20 06:48 03/06/20 11:52 0.0925 0.0926 1.00

Total

MB MB

Carrier Qualifier Limits %Yield Prepared Analyzed Dil Fac Ba Carrier 40 - 110 02/13/20 06:48 03/06/20 11:52 99.1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 460256

Matrix: Water Analysis Batch: 463404 Total

Count

Spike LCS LCS Uncert. %Rec. Added RLLimits Analyte Result Qual $(2\sigma + / -)$ MDC Unit %Rec Radium-226 15.1 12.83 1.34 1.00 0.146 pCi/L 75 - 125 85

LCS LCS

Carrier %Yield Qualifier I imits Ba Carrier 101 40 - 110

Lab Sample ID: 400-183738-12 MS Client Sample ID: BA02561 MW-12H

Matrix: Water Prep Type: Total/NA Analysis Batch: 463404 **Prep Batch: 460256**

Total Sample Sample **Spike** MS MS Uncert. %Rec.

Analyte Result Qual Added $(2\sigma + / -)$ RL**MDC** Unit Limits Result Qual %Rec Radium-226 0.299 15.1 13.32 1.38 1.00 0.125 pCi/L 86 75 - 138

MS MS Carrier %Yield Qualifier I imits Ba Carrier 99.4 40 - 110

Lab Sample ID: 400-183738-12 MSD Client Sample ID: BA02561 MW-12H

Matrix: Water

Analysis Batch: 463404 **Prep Batch: 460256** Total

MSD MSD %Rec. Sample Sample Spike Uncert. **RER** Analyte Added RL **MDC** Unit %Rec Result Qual Result Qual $(2\sigma + / -)$ Limits RER Limit Radium-226 0.299 15.1 13.09 1.37 1.00 0.149 pCi/L 85 75 - 138

MSD MSD

Carrier %Yield Qualifier Limits 97.8 Ba Carrier 40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-460265/23-A **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA

Analysis Batch: 461940 Count

Total MB MB Uncert. Uncert. $(2\sigma + / -)$ Analyte Result Qualifier $(2\sigma + / -)$ RL **MDC** Unit Dil Fac Prepared Analyzed Radium-228 0.4626 U 0.380 0.382 02/13/20 07:22 02/26/20 17:21 1.00 0.607 pCi/L

Eurofins TestAmerica, Pensacola

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3/10/2020

10

Prep Type: Total/NA

0.08

Prep Batch: 460265

Job ID: 400-183738-1

Client: Alabama Power General Test Laboratory Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

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

	MB MB			
Carrier	%Yield Qualifier	Limits	Prepared Analyzed	Dil Fac
Ba Carrier	99.1	40 - 110	02/13/20 07:22 02/26/20 17:21	1
Y Carrier	87.9	40 - 110	02/13/20 07:22 02/26/20 17:21	1

Lab Sample ID: LCS 160-460265/1-A

Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA **Analysis Batch: 461941 Prep Batch: 460265**

Total Spike LCS LCS Uncert. %Rec. **Analyte** Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-228 12.1 9.903 1.00 0.505 pCi/L 75 - 125 1.19 82

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 101 40 - 110 90.8 Y Carrier 40 - 110

Lab Sample ID: 400-183738-12 MS

Analysis Batch: 461941

Client Sample ID: BA02561 MW-12H **Matrix: Water** Prep Type: Total/NA Prep Batch: 460265

Total Sample Sample Spike MS MS Uncert. %Rec. Added RL Analyte Result Qual Result Qual (2σ+/-) **MDC** Unit %Rec Limits Radium-228 0.641 12.1 11.83 1.40 1.00 0.522 pCi/L 93 45 - 150

MS MS Carrier %Yield Qualifier Limits Ba Carrier 99 4 40 - 110 Y Carrier 84.1 40 - 110

Lab Sample ID: 400-183738-12 MSD

Matrix: Water

Radium-228

Analysis Batch: 461941

Prep Batch: 460265 Total MSD MSD %Rec. **RER** Sample Sample Spike Uncert. Analyte Added RL **MDC** Unit %Rec Limits Result Qual Result Qual $(2\sigma + / -)$ RER Limit

1.48

1.00

0.619 pCi/L

12.41

12.1

MSD MSD Carrier %Yield Qualifier Limits 40 - 110 Ba Carrier 97.8 40 - 110 Y Carrier 78.9

0.641

10

Client Sample ID: BA02561 MW-12H

45 - 150

97

Prep Type: Total/NA

0.20

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Hetum To Client Disposal By Lab Months

sible Hazard Identification



TestAmerica

Chain of Custody Record

FestAmerica Pensacola

Since laboratory oraceditations are subject to change. Test/merical laboratories, Inc. places the ownerthip of method, analyte & excreedations or our subcorticus compliance upon our subcorticus. The sample analyzed, the sample analyzed, the sample must be shipped back to the Test/merical aboratory or other instructions will be provided. Any changes to accreditation status should be brought to Test/merical analyzed, the sample are current to date, return the signed Chain of Custody attention is said compliance to Test/merical Laboratories, Inc. MW-2L Dup (Sample Duplicate) 100-56525-24537.1 FB-1 (Field Blank) Page 1 of 2 MW-1L MW-2L MW-3L Analysis Requested 3315_Ra226, 9320_Ra228, Ra226Ha228_GFPC Lab PM: Whitmire, Cheyenne R E-Mail: 2W 4200 CI E 2 4 009 WS Perform MS/MSD (Yes or No) Water Water Water Water Water Water O O 9 9 O g 12:18 12:28 13:30 13:30 14:50 16:10 TAT Requested (days): **Due Date Requested** Sample Date Sampler: TJ Daugherty Phone: 2/3/20 2/3/20 2/3/20 2/3/20 2/3/20 2/3/20 Project #: 40007143 SSOW#: Client Information (Sub Contract Lab) mple Identification - Client ID (Lab ID) 3355 McLemore Drive Pensacola, FL 32514 Phone (850) 474-1001 Fax (850) 478-2671 bama Power General Test Laboratory County Rd 87 GSC#8 gas Gypsum 1257 -664-6197 ura Midkif rate, Zip: L, 35040 3A02295 BA02296 3A02293 3A02294 A02292 BA02297

Special Instructions/Note:

Custody Seals Intact: Custody Seal No

															THE LESSEEN IN ENVIRONMENTAL TROUBLE
Client Information (Sub Contract Lab)	Sampler: Anthony Goggins	15		Lab PM: Whitm	ire, Che	syenne	Œ			Carrier T	Carrier Tracking No(s)	(s):	400-6	COC No: 400-56525-24537.1	37.1
Client Contact Laura Midkif	Phone:			E-Mail:	E-Mail: chevenne.whitmire@testamericainc.com	itmire@	testarr	ericain	C.com	State of Origin: Alabama	Origin: 1a		Page: Page	Page: Page 2 of 2	
Сотралу: Alabama Power General Test Laboratory					ccreditati	ons Requ	uired (Se	e note):					Job #		
Address: 744 County Rd 87 GSC#8	Due Date Requested	#						Analys	sis Re	Analysis Requested	P		Prese	Preservation Codes:	
yy: alera	TAT Requested (days):	ys): Routine	9			F		F	-				C-2-2	aOH Acetate	
State, Zip: AL, 35040							Jast	2,115					22:	D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: 205-664-6197	# Od				(OA			9778	_	_		_	7 0 I	mchlor scorbic Acid	
Email: bmidkif@southernco.com	#OM						35300	H977*					ers 	Water	
Project Name: C.C.R	Project #: 40007143							H '972	_			_	entaine R - 7 m m	DTA	
Sifter Gorgas Gypsum 1257	**MOSS					_		BH_US					of col	1.5	
Samule Identification - Client ID (I ah ID)	Sample Date	Sample	Sample Type (C=comp, G=crab)	Matrix (Wevester, Sweeld, Owerstateldi,	Field Filtered	2M 4500 CLE	70S 00S# WS	9315_Ra226, 93					nedmuN latoT	Special	Special Instructions/Note:
מחוקום ומכווניונסמוסון סופנוגים (במסוב)	\bigvee	\mathbb{N}		7	X	1									
BA02556	2/3/20	14:25	9	Water		-		×					1 MW-3V	30	
BA02557	2/3/20	15:42	9	Water				×					1 MW-3	6	
BA02558	2/3/20	16:54	B	Water				×					1 MW-4V	4V	
BA02559	2/4/20	09:55	9	Water				×					1 MW-4	4	
BA02560	2/4/20	09:55	B	Water				×					1 MW	4 DUP (Sa	MW-4 DUP (Sample Duplicate)
BA02561	2/4/20	11:12	9	Water	×			×					3 MW	MW-12H	
BA02562	2/4/20	12:40	9	Water				×					1 MW	MW-11H	
BA02563	2/4/20	13:35	В	Water				×					1 MW	MW-13H	
BA02564	2/4/20	14:48	G	Water				×					1 MW	нө-мм	
BA02565	2/4/20	16:35	G	Water				×					1 MW-8	ep -	
BA02566	2/4/20	17:00	G	Water				×					1 FB-	FB-2 (Field Blank)	(yı
BA02567	2/5/20	13:23	9	Water				×					1 WW	MW-8V	
BA02568	2/5/20	14:00	5	Water				×				H	1 EB-	EB-1 (Equipment Blank)	nt Blank)
	1					1	1	+	#	-	+				
					F	1	F	+	1	F	F	F	+		
					E		-	-	F	F	F				
							F				F	-			
Note: Since laboratory accreditations are subject to change, TestAmeric	ca Laboratories, Inc. places t	ne ownership o	of method, analy	rte & accreditat	Jdwoo uo	ance upo	on out su	bcontract	laborato	ries. This s	sample ship	oment is fo	warded under	chain-of-cust	ody. If the laboratory
currently maintain accreditation in the State of Origin listed above for an Laboratories, Inc. attention immediately. If all requested accreditations	of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the FestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, inc.	ilyzed, the san e signed Chair	ples must be s	hipped back to esting to said o	the TestA omplicand	merica la se to Test	America	or other Laborato	instructio ries, Inc.	ns will be p	rovided. A	ny change	to accreditation	on status sho	ild be brought to Test
Possible Hazard Identification Unconfirmed					Sa	Ret	Dispos.	al (A fe	е тау	be asse.	ssed if s	samples 3b	are retaine	d longer t	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) — Hetum To Client — Disposal By Lab — Archive For Months
Deliverable Beguested: 1 II III IV Other (specify)				43	43599 Sn	Special Instructions/OC Bequirements	structic	DO/Suc	Benuir	ements:					
Empty Kit Relinguished by: Relinquished by: Laura Midkiff	Date/Time: 2/06/2020 14:45	Date:		Water	Time:	Receive	weg by:				Method of	Shipment.	100	SUNI	Company
Relinquished by:	Date/Time:			Company		Received by	ed by:					Date/Time	3	7	Company
Refinquished by:	Date/Time:			Company		Received by	ed by:					Date/Time:			Company

Client: Alabama Power General Test Laboratory

Job Number: 400-183738-1

SDG Number: Gorgas Gypsum 1257

Login Number: 183738 List Source: Eurofins TestAmerica, Pensacola

List Number: 1

Creator: Perez, Trina M

Creator: Perez, Trina M		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	18.6°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client: Alabama Power General Test Laboratory

Job Number: 400-183738-1

SDG Number: Gorgas Gypsum 1257

Login Number: 183738 List Source: Eurofins TestAmerica, St. Louis
List Number: 2 List Creation: 02/12/20 10:30 AM

Creator: Hellm, Michael

Answer	Comment
True	
True	
N/A	
True	
N/A	
True	
True	20.0
True	
True	
True	
N/A	
True	
N/A	
N/A	
True	
N/A	
	True N/A True N/A True True True True True True True True

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
lowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-30-20
New York	NELAP Secondary AB	12115	04-01-20
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory

Job ID: 400-183738-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1257

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
lowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-20
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
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Pensacola

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
APCO-GS-GYPLF-MW-1	2/3/2020 12:05	Conductivity	2376.2	uS/cm
APCO-GS-GYPLF-MW-1	2/3/2020 12:05	DO	0.93	mg/L
APCO-GS-GYPLF-MW-1	2/3/2020 12:05	Depth to Water Detail	91.73	ft
APCO-GS-GYPLF-MW-1	2/3/2020 12:05	Oxidation Reduction Potention	125.42	mv
APCO-GS-GYPLF-MW-1	2/3/2020 12:05	рН	5	pН
APCO-GS-GYPLF-MW-1	2/3/2020 12:05	Temperature	19.87	С
APCO-GS-GYPLF-MW-1	2/3/2020 12:05	Turbidity	0.61	NTU
APCO-GS-GYPLF-MW-1	2/3/2020 12:10	Conductivity	2355.07	uS/cm
APCO-GS-GYPLF-MW-1	2/3/2020 12:10		1.04	mg/L
APCO-GS-GYPLF-MW-1	2/3/2020 12:10	Depth to Water Detail	91.73	ft
APCO-GS-GYPLF-MW-1		Oxidation Reduction Potention	125.62	mv
APCO-GS-GYPLF-MW-1	2/3/2020 12:10	рН	5.01	pН
APCO-GS-GYPLF-MW-1	2/3/2020 12:10	Temperature	19.69	С
APCO-GS-GYPLF-MW-1	2/3/2020 12:10	Turbidity	0.36	NTU
APCO-GS-GYPLF-MW-1	2/3/2020 12:15	Conductivity	2352.32	uS/cm
APCO-GS-GYPLF-MW-1	2/3/2020 12:15	DO	0.94	mg/L
APCO-GS-GYPLF-MW-1	2/3/2020 12:15	Depth to Water Detail	91.73	ft
APCO-GS-GYPLF-MW-1	2/3/2020 12:15	Oxidation Reduction Potention	126.68	mv
APCO-GS-GYPLF-MW-1	2/3/2020 12:15	рН	5	pН
APCO-GS-GYPLF-MW-1	2/3/2020 12:15	Temperature	19.89	С
APCO-GS-GYPLF-MW-1	2/3/2020 12:15		0.5	NTU
APCO-GS-GYPLF-MW-1	2/3/2020 12:20	Conductivity	2366.22	uS/cm
APCO-GS-GYPLF-MW-1	2/3/2020 12:20	DO	0.84	mg/L
APCO-GS-GYPLF-MW-1	2/3/2020 12:20	Depth to Water Detail	91.73	ft
APCO-GS-GYPLF-MW-1	2/3/2020 12:20	Oxidation Reduction Potention	124.84	mv
APCO-GS-GYPLF-MW-1	2/3/2020 12:20	рН		pН
APCO-GS-GYPLF-MW-1	2/3/2020 12:20	Temperature	19.95	С
APCO-GS-GYPLF-MW-1	2/3/2020 12:20	Turbidity	0.34	NTU
APCO-GS-GYPLF-MW-1	2/3/2020 12:25		2376.8	uS/cm
APCO-GS-GYPLF-MW-1	2/3/2020 12:25	DO	0.82	mg/L
APCO-GS-GYPLF-MW-1	2/3/2020 12:25	Depth to Water Detail	91.73	
APCO-GS-GYPLF-MW-1	2/3/2020 12:25	Oxidation Reduction Potention	123.43	mv
APCO-GS-GYPLF-MW-1	2/3/2020 12:25	рН	5	рН
APCO-GS-GYPLF-MW-1	2/3/2020 12:25	Temperature	19.79	С
APCO-GS-GYPLF-MW-1	2/3/2020 12:25	Turbidity	0.52	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
APCO-GS-GYPLF-MW-2	2/3/2020 13:07	Conductivity	1787.74	uS/cm
APCO-GS-GYPLF-MW-2	2/3/2020 13:07	DO	0.37	mg/L
APCO-GS-GYPLF-MW-2	2/3/2020 13:07	Depth to Water Detail	84.65	ft
APCO-GS-GYPLF-MW-2	2/3/2020 13:07	Oxidation Reduction Potention	95.28	mv
APCO-GS-GYPLF-MW-2	2/3/2020 13:07	рН	5.87	pН
APCO-GS-GYPLF-MW-2	2/3/2020 13:07	Temperature	19.25	С
APCO-GS-GYPLF-MW-2	2/3/2020 13:07	Turbidity	9.84	NTU
APCO-GS-GYPLF-MW-2	2/3/2020 13:12	Conductivity	1730.42	uS/cm
APCO-GS-GYPLF-MW-2	2/3/2020 13:12	DO	0.3	mg/L
APCO-GS-GYPLF-MW-2	2/3/2020 13:12	Depth to Water Detail	84.65	ft
APCO-GS-GYPLF-MW-2	2/3/2020 13:12	Oxidation Reduction Potention	93.74	mv
APCO-GS-GYPLF-MW-2	2/3/2020 13:12	рН	5.91	pН
APCO-GS-GYPLF-MW-2	2/3/2020 13:12	Temperature	19.21	С
APCO-GS-GYPLF-MW-2	2/3/2020 13:12	Turbidity	2.14	NTU
APCO-GS-GYPLF-MW-2	2/3/2020 13:17	Conductivity	1715.99	uS/cm
APCO-GS-GYPLF-MW-2	2/3/2020 13:17	DO	0.25	mg/L
APCO-GS-GYPLF-MW-2	2/3/2020 13:17	Depth to Water Detail	84.65	ft
APCO-GS-GYPLF-MW-2	2/3/2020 13:17	Oxidation Reduction Potention	92.1	mv
APCO-GS-GYPLF-MW-2	2/3/2020 13:17	рН	5.93	pН
APCO-GS-GYPLF-MW-2	2/3/2020 13:17	Temperature	19.11	С
APCO-GS-GYPLF-MW-2	2/3/2020 13:17	Turbidity	0.9	NTU
APCO-GS-GYPLF-MW-2	2/3/2020 13:22	Conductivity	1705.31	uS/cm
APCO-GS-GYPLF-MW-2	2/3/2020 13:22	DO	0.25	mg/L
APCO-GS-GYPLF-MW-2	2/3/2020 13:22	Depth to Water Detail	84.65	ft
APCO-GS-GYPLF-MW-2	2/3/2020 13:22	Oxidation Reduction Potention	89.42	mv
APCO-GS-GYPLF-MW-2	2/3/2020 13:22	±	5.94	
APCO-GS-GYPLF-MW-2	2/3/2020 13:22	Temperature	19.07	C
APCO-GS-GYPLF-MW-2	2/3/2020 13:22	Turbidity	0.65	NTU
APCO-GS-GYPLF-MW-2	2/3/2020 13:27	Conductivity	1697.19	uS/cm
APCO-GS-GYPLF-MW-2	2/3/2020 13:27		0.23	mg/L
APCO-GS-GYPLF-MW-2	2/3/2020 13:27	Depth to Water Detail	84.65	
APCO-GS-GYPLF-MW-2	2/3/2020 13:27	Oxidation Reduction Potention	88.19	mv
APCO-GS-GYPLF-MW-2	2/3/2020 13:27	рН	5.95	рН
APCO-GS-GYPLF-MW-2	2/3/2020 13:27	Temperature	19.09	С
APCO-GS-GYPLF-MW-2	2/3/2020 13:27	Turbidity	0.61	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
APCO-GS-GYPLF-MW-3	2/3/2020 14:20	Conductivity	3546	uS/cm
APCO-GS-GYPLF-MW-3	2/3/2020 14:20	DO	7.68	mg/L
APCO-GS-GYPLF-MW-3	2/3/2020 14:20	Depth to Water Detail	109.6	ft
APCO-GS-GYPLF-MW-3	2/3/2020 14:20	Oxidation Reduction Potention	155.34	mv
APCO-GS-GYPLF-MW-3	2/3/2020 14:20	рН	3.86	рН
APCO-GS-GYPLF-MW-3	2/3/2020 14:20	Temperature	21.51	С
APCO-GS-GYPLF-MW-3	2/3/2020 14:20	Turbidity	0.61	NTU
APCO-GS-GYPLF-MW-3	2/3/2020 14:25	Conductivity	3466.71	uS/cm
APCO-GS-GYPLF-MW-3	2/3/2020 14:25	DO	6.7	mg/L
APCO-GS-GYPLF-MW-3	2/3/2020 14:25	Depth to Water Detail	109.72	ft
APCO-GS-GYPLF-MW-3	2/3/2020 14:25	Oxidation Reduction Potention	157.87	mv
APCO-GS-GYPLF-MW-3	2/3/2020 14:25	рН	4.16	рН
APCO-GS-GYPLF-MW-3	2/3/2020 14:25	Temperature	21.62	С
APCO-GS-GYPLF-MW-3	2/3/2020 14:25	Turbidity	0.68	NTU
APCO-GS-GYPLF-MW-3	2/3/2020 14:30		3319.74	uS/cm
APCO-GS-GYPLF-MW-3	2/3/2020 14:30	DO	5.89	mg/L
APCO-GS-GYPLF-MW-3	2/3/2020 14:30	Depth to Water Detail	109.86	ft
APCO-GS-GYPLF-MW-3		Oxidation Reduction Potention	140.14	mv
APCO-GS-GYPLF-MW-3	2/3/2020 14:30	рН	5.26	рН
APCO-GS-GYPLF-MW-3	2/3/2020 14:30	Temperature	21.85	С
APCO-GS-GYPLF-MW-3	2/3/2020 14:30	Turbidity	0.47	NTU
APCO-GS-GYPLF-MW-3	2/3/2020 14:35	Conductivity	3304.92	uS/cm
APCO-GS-GYPLF-MW-3	2/3/2020 14:35	DO	5.73	mg/L
APCO-GS-GYPLF-MW-3	2/3/2020 14:35	Depth to Water Detail	109.93	ft
APCO-GS-GYPLF-MW-3	2/3/2020 14:35	Oxidation Reduction Potention	135.05	mv
APCO-GS-GYPLF-MW-3	2/3/2020 14:35	рН	5.47	рН
APCO-GS-GYPLF-MW-3	2/3/2020 14:35	Temperature	21.6	С
APCO-GS-GYPLF-MW-3	2/3/2020 14:35	Turbidity	0.51	NTU
APCO-GS-GYPLF-MW-3	2/3/2020 14:40	Conductivity	3302.95	uS/cm
APCO-GS-GYPLF-MW-3	2/3/2020 14:40	DO	5.68	mg/L
APCO-GS-GYPLF-MW-3	2/3/2020 14:40	Depth to Water Detail	110.09	ft
APCO-GS-GYPLF-MW-3	2/3/2020 14:40	Oxidation Reduction Potention	132.57	mv
APCO-GS-GYPLF-MW-3	2/3/2020 14:40	рН	5.52	рН
APCO-GS-GYPLF-MW-3	2/3/2020 14:40	Temperature	21.62	С
APCO-GS-GYPLF-MW-3	2/3/2020 14:40	Turbidity	0.74	NTU
APCO-GS-GYPLF-MW-3	2/3/2020 14:45	Conductivity	3312.09	uS/cm
APCO-GS-GYPLF-MW-3	2/3/2020 14:45	DO	5.63	mg/L
APCO-GS-GYPLF-MW-3	2/3/2020 14:45	Depth to Water Detail	110.18	ft
APCO-GS-GYPLF-MW-3	2/3/2020 14:45	Oxidation Reduction Potention	131.47	mv
APCO-GS-GYPLF-MW-3	2/3/2020 14:45	рН	5.54	рН
APCO-GS-GYPLF-MW-3	2/3/2020 14:45	Temperature	21.57	С
APCO-GS-GYPLF-MW-3	2/3/2020 14:45	Turbidity	0.96	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
APCO-GS-GYPLF-MW-4	2/3/2020 15:39	Conductivity	3137.22	uS/cm
APCO-GS-GYPLF-MW-4	2/3/2020 15:39	DO	2.22	mg/L
APCO-GS-GYPLF-MW-4	2/3/2020 15:39	Depth to Water Detail	116.22	ft
APCO-GS-GYPLF-MW-4		Oxidation Reduction Potention	126.06	mv
APCO-GS-GYPLF-MW-4	2/3/2020 15:39	рН	6.12	рН
APCO-GS-GYPLF-MW-4	2/3/2020 15:39	Temperature	20.18	С
APCO-GS-GYPLF-MW-4	2/3/2020 15:39	Turbidity	1.01	NTU
APCO-GS-GYPLF-MW-4	2/3/2020 15:44	Conductivity	3124.19	uS/cm
APCO-GS-GYPLF-MW-4	2/3/2020 15:44	DO	2.21	mg/L
APCO-GS-GYPLF-MW-4	2/3/2020 15:44	Depth to Water Detail	116.22	ft
APCO-GS-GYPLF-MW-4	2/3/2020 15:44	Oxidation Reduction Potention	125.29	mv
APCO-GS-GYPLF-MW-4	2/3/2020 15:44	рН	6.12	рН
APCO-GS-GYPLF-MW-4	2/3/2020 15:44	Temperature	20.19	С
APCO-GS-GYPLF-MW-4	2/3/2020 15:44	Turbidity	0.91	NTU
APCO-GS-GYPLF-MW-4	2/3/2020 15:49	Conductivity	3121.48	uS/cm
APCO-GS-GYPLF-MW-4	2/3/2020 15:49	DO	2.5	mg/L
APCO-GS-GYPLF-MW-4	2/3/2020 15:49	Depth to Water Detail	116.22	ft
APCO-GS-GYPLF-MW-4	2/3/2020 15:49	Oxidation Reduction Potention	124.81	mv
APCO-GS-GYPLF-MW-4	2/3/2020 15:49	рН	6.12	рН
APCO-GS-GYPLF-MW-4	2/3/2020 15:49	Temperature	20.31	С
APCO-GS-GYPLF-MW-4	2/3/2020 15:49	Turbidity	0.8	NTU
APCO-GS-GYPLF-MW-4	2/3/2020 15:54	Conductivity	3121.14	uS/cm
APCO-GS-GYPLF-MW-4	2/3/2020 15:54	DO	2.7	mg/L
APCO-GS-GYPLF-MW-4	2/3/2020 15:54	Depth to Water Detail	116.22	ft
APCO-GS-GYPLF-MW-4	2/3/2020 15:54	Oxidation Reduction Potention	124.65	mv
APCO-GS-GYPLF-MW-4	2/3/2020 15:54	рН	6.13	рН
APCO-GS-GYPLF-MW-4	2/3/2020 15:54	Temperature	20.19	C
APCO-GS-GYPLF-MW-4	2/3/2020 15:54	Turbidity	0.53	NTU
APCO-GS-GYPLF-MW-4	2/3/2020 15:59	Conductivity	3121.01	uS/cm
APCO-GS-GYPLF-MW-4	2/3/2020 15:59	DO	2.82	mg/L
APCO-GS-GYPLF-MW-4	2/3/2020 15:59	Depth to Water Detail	116.22	ft
APCO-GS-GYPLF-MW-4	2/3/2020 15:59	Oxidation Reduction Potention	124.38	mv
APCO-GS-GYPLF-MW-4	2/3/2020 15:59	рН	6.14	pН
APCO-GS-GYPLF-MW-4	2/3/2020 15:59	Temperature	20.16	
APCO-GS-GYPLF-MW-4	2/3/2020 15:59	•	0.83	NTU
APCO-GS-GYPLF-MW-4	2/3/2020 16:04	·	3119.33	uS/cm
APCO-GS-GYPLF-MW-4	2/3/2020 16:04	DO		mg/L
APCO-GS-GYPLF-MW-4		Depth to Water Detail	116.22	
APCO-GS-GYPLF-MW-4		Oxidation Reduction Potention	124.13	
APCO-GS-GYPLF-MW-4	2/3/2020 16:04	рН	6.14	•
APCO-GS-GYPLF-MW-4	2/3/2020 16:04	4	20.34	
APCO-GS-GYPLF-MW-4	2/3/2020 16:04	Turbidity	0.41	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3V	2/3/2020 13:46	•	3666.47	uS/cm
GS-GSA-MW-3V	2/3/2020 13:46	DO		mg/L
GS-GSA-MW-3V	2/3/2020 13:46	Depth to Water Detail	122.33	ft
GS-GSA-MW-3V	2/3/2020 13:46	Oxidation Reduction Potention	-77.92	mv
GS-GSA-MW-3V	2/3/2020 13:46	рН	6.08	•
GS-GSA-MW-3V	2/3/2020 13:46	Temperature	21.46	C
GS-GSA-MW-3V	2/3/2020 13:46	Turbidity	12.1	NTU
GS-GSA-MW-3V	2/3/2020 13:51	Conductivity	3661.5	uS/cm
GS-GSA-MW-3V	2/3/2020 13:51	DO	0.78	mg/L
GS-GSA-MW-3V	2/3/2020 13:51	Depth to Water Detail	123.28	ft
GS-GSA-MW-3V	2/3/2020 13:51	Oxidation Reduction Potention	-46.39	mv
GS-GSA-MW-3V	2/3/2020 13:51	рН	5.94	рН
GS-GSA-MW-3V	2/3/2020 13:51	Temperature	21.28	С
GS-GSA-MW-3V	2/3/2020 13:51	Turbidity	5.45	NTU
GS-GSA-MW-3V	2/3/2020 13:56	Conductivity	3642.39	uS/cm
GS-GSA-MW-3V	2/3/2020 13:56		0.77	mg/L
GS-GSA-MW-3V	2/3/2020 13:56	Depth to Water Detail	123.36	
GS-GSA-MW-3V		Oxidation Reduction Potention	-33.17	mv
GS-GSA-MW-3V	2/3/2020 13:56	рН	5.9	рН
GS-GSA-MW-3V	2/3/2020 13:56	Temperature	21.31	
GS-GSA-MW-3V	2/3/2020 13:56	Turbidity	2.8	NTU
GS-GSA-MW-3V	2/3/2020 14:01		3612.33	uS/cm
GS-GSA-MW-3V	2/3/2020 14:01	DO	0.76	mg/L
GS-GSA-MW-3V	2/3/2020 14:01	Depth to Water Detail	123.7	
GS-GSA-MW-3V		Oxidation Reduction Potention	-29.68	mv
GS-GSA-MW-3V	2/3/2020 14:01	рН	5.88	рН
GS-GSA-MW-3V	2/3/2020 14:01	Temperature	21.43	C
GS-GSA-MW-3V	2/3/2020 14:01	Turbidity	2.29	NTU
GS-GSA-MW-3V	2/3/2020 14:06	Conductivity	3550.97	uS/cm
GS-GSA-MW-3V	2/3/2020 14:06	DO	0.78	mg/L
GS-GSA-MW-3V		Depth to Water Detail	123.96	
GS-GSA-MW-3V		Oxidation Reduction Potention	-35.55	mv
GS-GSA-MW-3V	2/3/2020 14:06	рН	5.87	
GS-GSA-MW-3V	2/3/2020 14:06	Temperature	21.26	•
GS-GSA-MW-3V	2/3/2020 14:06	Turbidity		NTU
GS-GSA-MW-3V	2/3/2020 14:11		3450.49	
GS-GSA-MW-3V	2/3/2020 14:11	<u>`</u>	0.76	mg/L
GS-GSA-MW-3V	2/3/2020 14:11	Depth to Water Detail	124.36	_
GS-GSA-MW-3V		Oxidation Reduction Potention	-43.29	mv
GS-GSA-MW-3V	2/3/2020 14:11		5.87	
GS-GSA-MW-3V	2/3/2020 14:11	*	21.31	•
GS-GSA-MW-3V	2/3/2020 14:11	*		NTU
GS-GSA-MW-3V	2/3/2020 14:16	· · · · · · · · · · · · · · · · · · ·	3440.63	
GS-GSA-MW-3V	2/3/2020 14:16	·		mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3V	2/3/2020 14:16	Depth to Water Detail	124.43	ft
GS-GSA-MW-3V	2/3/2020 14:16	Oxidation Reduction Potention	-48.45	mv
GS-GSA-MW-3V	2/3/2020 14:16	pН	5.87	рН
GS-GSA-MW-3V	2/3/2020 14:16	Temperature	21.35	С
GS-GSA-MW-3V	2/3/2020 14:16	Turbidity	1.03	NTU
GS-GSA-MW-3V	2/3/2020 14:21	Conductivity	3331.61	uS/cm
GS-GSA-MW-3V	2/3/2020 14:21	DO	0.75	mg/L
GS-GSA-MW-3V	2/3/2020 14:21	Depth to Water Detail	124.58	ft
GS-GSA-MW-3V	2/3/2020 14:21	Oxidation Reduction Potention	-51.26	mv
GS-GSA-MW-3V	2/3/2020 14:21	рН	5.88	pН
GS-GSA-MW-3V	2/3/2020 14:21	Temperature	21.33	С
GS-GSA-MW-3V	2/3/2020 14:21	Turbidity	1.28	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3	2/3/2020 15:24	Conductivity	4164.22	uS/cm
GS-GSA-MW-3	2/3/2020 15:24	DO	0.41	mg/L
GS-GSA-MW-3	2/3/2020 15:24	Depth to Water Detail	103.44	ft
GS-GSA-MW-3	2/3/2020 15:24	Oxidation Reduction Potention	3.08	mv
GS-GSA-MW-3	2/3/2020 15:24	рН	5.93	pН
GS-GSA-MW-3	2/3/2020 15:24	Temperature	20.62	С
GS-GSA-MW-3	2/3/2020 15:24	Turbidity	3.88	NTU
GS-GSA-MW-3	2/3/2020 15:29	Conductivity	4153.59	uS/cm
GS-GSA-MW-3	2/3/2020 15:29	DO	0.28	mg/L
GS-GSA-MW-3	2/3/2020 15:29	Depth to Water Detail	103.44	ft
GS-GSA-MW-3	2/3/2020 15:29	Oxidation Reduction Potention	-7.57	mv
GS-GSA-MW-3	2/3/2020 15:29	рН	5.95	pН
GS-GSA-MW-3	2/3/2020 15:29	Temperature	20.5	С
GS-GSA-MW-3	2/3/2020 15:29	Turbidity	3.74	NTU
GS-GSA-MW-3	2/3/2020 15:34	Conductivity	4116.28	uS/cm
GS-GSA-MW-3	2/3/2020 15:34	DO	0.24	mg/L
GS-GSA-MW-3		Depth to Water Detail	103.44	ft
GS-GSA-MW-3	2/3/2020 15:34	Oxidation Reduction Potention	-11.94	mv
GS-GSA-MW-3	2/3/2020 15:34	рН	5.97	pН
GS-GSA-MW-3	2/3/2020 15:34	Temperature	20.45	С
GS-GSA-MW-3	2/3/2020 15:34	Turbidity	4.19	NTU
GS-GSA-MW-3	2/3/2020 15:39	Conductivity	4133.61	uS/cm
GS-GSA-MW-3	2/3/2020 15:39	DO	0.22	mg/L
GS-GSA-MW-3	2/3/2020 15:39	Depth to Water Detail	103.44	ft
GS-GSA-MW-3	2/3/2020 15:39	Oxidation Reduction Potention	-14.71	mv
GS-GSA-MW-3	2/3/2020 15:39	рН	5.98	рН
GS-GSA-MW-3	2/3/2020 15:39	Temperature	20.43	С
GS-GSA-MW-3	2/3/2020 15:39	Turbidity	3.56	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-4V	2/3/2020 16:36	Conductivity	1493.76	uS/cm
GS-GSA-MW-4V	2/3/2020 16:36	DO	0.66	mg/L
GS-GSA-MW-4V	2/3/2020 16:36	Depth to Water Detail	114.43	ft
GS-GSA-MW-4V	2/3/2020 16:36	Oxidation Reduction Potention	31.47	mv
GS-GSA-MW-4V	2/3/2020 16:36	рН	5.83	pН
GS-GSA-MW-4V	2/3/2020 16:36	Temperature	19.96	С
GS-GSA-MW-4V	2/3/2020 16:36	Turbidity	8.02	NTU
GS-GSA-MW-4V	2/3/2020 16:41	Conductivity	1487.23	uS/cm
GS-GSA-MW-4V	2/3/2020 16:41	DO	0.46	mg/L
GS-GSA-MW-4V	2/3/2020 16:41	Depth to Water Detail	114.84	ft
GS-GSA-MW-4V	2/3/2020 16:41	Oxidation Reduction Potention	31.86	mv
GS-GSA-MW-4V	2/3/2020 16:41		5.85	pН
GS-GSA-MW-4V	2/3/2020 16:41	Temperature	19.83	С
GS-GSA-MW-4V	2/3/2020 16:41	Turbidity	6.03	NTU
GS-GSA-MW-4V	2/3/2020 16:46	Conductivity	1484.62	uS/cm
GS-GSA-MW-4V	2/3/2020 16:46		0.41	mg/L
GS-GSA-MW-4V	2/3/2020 16:46	Depth to Water Detail	115	ft
GS-GSA-MW-4V	2/3/2020 16:46	Oxidation Reduction Potention	32.68	mv
GS-GSA-MW-4V	2/3/2020 16:46	рН	5.85	pН
GS-GSA-MW-4V	2/3/2020 16:46	Temperature	19.76	С
GS-GSA-MW-4V	2/3/2020 16:46	Turbidity	3.16	NTU
GS-GSA-MW-4V	2/3/2020 16:51	Conductivity	1481.03	uS/cm
GS-GSA-MW-4V	2/3/2020 16:51	DO	0.38	mg/L
GS-GSA-MW-4V	2/3/2020 16:51	Depth to Water Detail	115.02	ft
GS-GSA-MW-4V	2/3/2020 16:51	Oxidation Reduction Potention	33.95	mv
GS-GSA-MW-4V	2/3/2020 16:51	рН	5.84	
GS-GSA-MW-4V	2/3/2020 16:51	Temperature	19.72	С
GS-GSA-MW-4V	2/3/2020 16:51	Turbidity	2.76	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-4	2/4/2020 9:38	Conductivity	1222.54	uS/cm
GS-GSA-MW-4	2/4/2020 9:38	DO	0.45	mg/L
GS-GSA-MW-4	2/4/2020 9:38	Depth to Water Detail	90.01	ft
GS-GSA-MW-4	2/4/2020 9:38	Oxidation Reduction Potention	309.41	mv
GS-GSA-MW-4	2/4/2020 9:38	рН	3.78	pН
GS-GSA-MW-4	2/4/2020 9:38	Temperature	19.92	С
GS-GSA-MW-4	2/4/2020 9:38	Turbidity	7.04	NTU
GS-GSA-MW-4	2/4/2020 9:43	Conductivity	1221.13	uS/cm
GS-GSA-MW-4	2/4/2020 9:43	DO	0.35	mg/L
GS-GSA-MW-4	2/4/2020 9:43	Depth to Water Detail	90.01	ft
GS-GSA-MW-4	2/4/2020 9:43	Oxidation Reduction Potention	304.49	mv
GS-GSA-MW-4	2/4/2020 9:43	рН	3.81	pН
GS-GSA-MW-4	2/4/2020 9:43	Temperature	19.91	С
GS-GSA-MW-4	2/4/2020 9:43	Turbidity	5.79	NTU
GS-GSA-MW-4	2/4/2020 9:48	Conductivity	1221.24	uS/cm
GS-GSA-MW-4	2/4/2020 9:48	DO	0.31	mg/L
GS-GSA-MW-4	2/4/2020 9:48	Depth to Water Detail	90.01	ft
GS-GSA-MW-4	2/4/2020 9:48	Oxidation Reduction Potention	300.85	mv
GS-GSA-MW-4	2/4/2020 9:48	рН	3.82	pН
GS-GSA-MW-4	2/4/2020 9:48	Temperature	19.92	С
GS-GSA-MW-4	2/4/2020 9:48	Turbidity	5.54	NTU
GS-GSA-MW-4	2/4/2020 9:53	Conductivity	1221.02	uS/cm
GS-GSA-MW-4	2/4/2020 9:53	DO	0.29	mg/L
GS-GSA-MW-4	2/4/2020 9:53	Depth to Water Detail	90.01	
GS-GSA-MW-4	2/4/2020 9:53	Oxidation Reduction Potention	298.36	mv
GS-GSA-MW-4	2/4/2020 9:53	рН	3.83	рН
GS-GSA-MW-4	2/4/2020 9:53	Temperature	19.91	С
GS-GSA-MW-4	2/4/2020 9:53	Turbidity	4.79	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-12H	2/4/2020 10:44	Conductivity	1783.2	uS/cm
GS-GSA-MW-12H	2/4/2020 10:44	DO	0.27	mg/L
GS-GSA-MW-12H	2/4/2020 10:44	Depth to Water Detail	58.96	ft
GS-GSA-MW-12H	2/4/2020 10:44	Oxidation Reduction Potention	206.3	mv
GS-GSA-MW-12H	2/4/2020 10:44	рН	5.02	рН
GS-GSA-MW-12H	2/4/2020 10:44	Temperature	19.16	С
GS-GSA-MW-12H	2/4/2020 10:44	Turbidity	28.8	NTU
GS-GSA-MW-12H	2/4/2020 10:49	Conductivity	1736.09	uS/cm
GS-GSA-MW-12H	2/4/2020 10:49	DO	0.23	mg/L
GS-GSA-MW-12H	2/4/2020 10:49	Depth to Water Detail	59.07	ft
GS-GSA-MW-12H		Oxidation Reduction Potention	222.39	mv
GS-GSA-MW-12H	2/4/2020 10:49	рН	4.79	рН
GS-GSA-MW-12H	2/4/2020 10:49	Temperature	19.26	С
GS-GSA-MW-12H	2/4/2020 10:49	Turbidity	11.3	NTU
GS-GSA-MW-12H	2/4/2020 10:54	Conductivity	1723.12	uS/cm
GS-GSA-MW-12H	2/4/2020 10:54	DO	0.21	mg/L
GS-GSA-MW-12H	2/4/2020 10:54	Depth to Water Detail	59.07	ft
GS-GSA-MW-12H	2/4/2020 10:54	Oxidation Reduction Potention	231	mv
GS-GSA-MW-12H	2/4/2020 10:54	рН	4.72	рН
GS-GSA-MW-12H	2/4/2020 10:54	Temperature	19.22	С
GS-GSA-MW-12H	2/4/2020 10:54	Turbidity	8.88	NTU
GS-GSA-MW-12H	2/4/2020 10:59	Conductivity	1715.29	uS/cm
GS-GSA-MW-12H	2/4/2020 10:59	DO	0.21	mg/L
GS-GSA-MW-12H	2/4/2020 10:59	Depth to Water Detail	59.07	ft
GS-GSA-MW-12H	2/4/2020 10:59	Oxidation Reduction Potention	240.65	mv
GS-GSA-MW-12H	2/4/2020 10:59	рН	4.65	рН
GS-GSA-MW-12H	2/4/2020 10:59	Temperature	19.21	С
GS-GSA-MW-12H	2/4/2020 10:59	Turbidity	6.96	NTU
GS-GSA-MW-12H	2/4/2020 11:04	Conductivity	1711.22	uS/cm
GS-GSA-MW-12H	2/4/2020 11:04	DO	0.25	mg/L
GS-GSA-MW-12H	2/4/2020 11:04	Depth to Water Detail	59.07	
GS-GSA-MW-12H	2/4/2020 11:04	Oxidation Reduction Potention	247.57	mv
GS-GSA-MW-12H	2/4/2020 11:04	рН	4.62	рН
GS-GSA-MW-12H	2/4/2020 11:04	Temperature	19.23	С
GS-GSA-MW-12H	2/4/2020 11:04	Turbidity	5.45	NTU
GS-GSA-MW-12H	2/4/2020 11:09	Conductivity	1706.04	uS/cm
GS-GSA-MW-12H	2/4/2020 11:09	DO	0.27	mg/L
GS-GSA-MW-12H	2/4/2020 11:09	Depth to Water Detail	59.07	ft
GS-GSA-MW-12H	2/4/2020 11:09	Oxidation Reduction Potention	256.14	mv
GS-GSA-MW-12H	2/4/2020 11:09	рН	4.57	рН
GS-GSA-MW-12H	2/4/2020 11:09	Temperature	19.23	С
GS-GSA-MW-12H	2/4/2020 11:09	Turbidity	4.82	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-11H	2/4/2020 12:08	Conductivity	1515.33	uS/cm
GS-GSA-MW-11H	2/4/2020 12:08	DO	0.2	mg/L
GS-GSA-MW-11H	2/4/2020 12:08	Depth to Water Detail	7.75	ft
GS-GSA-MW-11H		Oxidation Reduction Potention	86.51	mv
GS-GSA-MW-11H	2/4/2020 12:08	рН	6	рН
GS-GSA-MW-11H	2/4/2020 12:08	Temperature	19.11	С
GS-GSA-MW-11H	2/4/2020 12:08	Turbidity	12	NTU
GS-GSA-MW-11H	2/4/2020 12:13	Conductivity	1513.46	uS/cm
GS-GSA-MW-11H	2/4/2020 12:13	DO	0.18	mg/L
GS-GSA-MW-11H	2/4/2020 12:13	Depth to Water Detail	7.9	ft
GS-GSA-MW-11H		Oxidation Reduction Potention	67.74	mv
GS-GSA-MW-11H	2/4/2020 12:13	рН	6.01	рН
GS-GSA-MW-11H	2/4/2020 12:13	Temperature	19.19	C
GS-GSA-MW-11H	2/4/2020 12:13		8.5	NTU
GS-GSA-MW-11H	2/4/2020 12:18		1504.37	uS/cm
GS-GSA-MW-11H	2/4/2020 12:18		0.18	mg/L
GS-GSA-MW-11H	2/4/2020 12:18	Depth to Water Detail	7.97	
GS-GSA-MW-11H		Oxidation Reduction Potention	61.59	mv
GS-GSA-MW-11H	2/4/2020 12:18	рН	6.01	рН
GS-GSA-MW-11H	2/4/2020 12:18	Temperature	19.19	C
GS-GSA-MW-11H	2/4/2020 12:18		7.33	NTU
GS-GSA-MW-11H	2/4/2020 12:23	Conductivity	1497.23	uS/cm
GS-GSA-MW-11H	2/4/2020 12:23	DO	0.17	mg/L
GS-GSA-MW-11H	2/4/2020 12:23	Depth to Water Detail	8.02	
GS-GSA-MW-11H		Oxidation Reduction Potention	55.95	mv
GS-GSA-MW-11H	2/4/2020 12:23	рН	6.01	рН
GS-GSA-MW-11H	2/4/2020 12:23	Temperature	19.18	
GS-GSA-MW-11H	2/4/2020 12:23		6.78	NTU
GS-GSA-MW-11H	2/4/2020 12:28	Conductivity	1489.75	uS/cm
GS-GSA-MW-11H	2/4/2020 12:28		0.17	mg/L
GS-GSA-MW-11H		Depth to Water Detail	8.08	
GS-GSA-MW-11H	2/4/2020 12:28	Oxidation Reduction Potention	54.43	mv
GS-GSA-MW-11H	2/4/2020 12:28	рН	6.02	рН
GS-GSA-MW-11H	2/4/2020 12:28	Temperature	19.23	C
GS-GSA-MW-11H	2/4/2020 12:28	Turbidity	5.85	NTU
GS-GSA-MW-11H	2/4/2020 12:33	,	1479.14	uS/cm
GS-GSA-MW-11H	2/4/2020 12:33	•	0.17	mg/L
GS-GSA-MW-11H	2/4/2020 12:33	Depth to Water Detail	8.1	ft
GS-GSA-MW-11H		Oxidation Reduction Potention	55.59	mv
GS-GSA-MW-11H	2/4/2020 12:33	рН	6.02	рН
GS-GSA-MW-11H	2/4/2020 12:33		19.24	С
GS-GSA-MW-11H	2/4/2020 12:33	4	5.34	NTU
GS-GSA-MW-11H	2/4/2020 12:38		1472.55	
GS-GSA-MW-11H	2/4/2020 12:38	DO	0.17	mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-11H	2/4/2020 12:38	Depth to Water Detail	8.11	ft
GS-GSA-MW-11H	2/4/2020 12:38	Oxidation Reduction Potention	55.02	mv
GS-GSA-MW-11H	2/4/2020 12:38	pН	6.02	рН
GS-GSA-MW-11H	2/4/2020 12:38	Temperature	19.26	С
GS-GSA-MW-11H	2/4/2020 12:38	Turbidity	6.12	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-13H	2/4/2020 13:18	Conductivity	1499.44	uS/cm
GS-GSA-MW-13H	2/4/2020 13:18	DO	0.2	mg/L
GS-GSA-MW-13H	2/4/2020 13:18	Depth to Water Detail	9.45	ft
GS-GSA-MW-13H	2/4/2020 13:18	Oxidation Reduction Potention	5.81	mv
GS-GSA-MW-13H	2/4/2020 13:18	1	5.99	рН
GS-GSA-MW-13H	2/4/2020 13:18	Temperature	19.28	C
GS-GSA-MW-13H	2/4/2020 13:18		1.96	NTU
GS-GSA-MW-13H	2/4/2020 13:23	Conductivity	1499.94	uS/cm
GS-GSA-MW-13H	2/4/2020 13:23	DO		mg/L
GS-GSA-MW-13H	2/4/2020 13:23	Depth to Water Detail	9.47	ft
GS-GSA-MW-13H	2/4/2020 13:23	Oxidation Reduction Potention	0.97	mv
GS-GSA-MW-13H	2/4/2020 13:23	рН	6	рН
GS-GSA-MW-13H	2/4/2020 13:23	Temperature	19.22	C
GS-GSA-MW-13H	2/4/2020 13:23	Turbidity	1.43	NTU
GS-GSA-MW-13H	2/4/2020 13:28	Conductivity	1501.12	uS/cm
GS-GSA-MW-13H	2/4/2020 13:28			mg/L
GS-GSA-MW-13H		Depth to Water Detail	9.47	ft
GS-GSA-MW-13H	2/4/2020 13:28	Oxidation Reduction Potention	-1.77	mv
GS-GSA-MW-13H	2/4/2020 13:28	4	6	рН
GS-GSA-MW-13H	2/4/2020 13:28	Temperature	19.25	
GS-GSA-MW-13H	2/4/2020 13:28		1.39	NTU
GS-GSA-MW-13H	2/4/2020 13:33	Conductivity	1502.46	uS/cm
GS-GSA-MW-13H	2/4/2020 13:33	DO		mg/L
GS-GSA-MW-13H		Depth to Water Detail	9.47	ft
GS-GSA-MW-13H	2/4/2020 13:33	Oxidation Reduction Potention	-3.51	mv
GS-GSA-MW-13H	2/4/2020 13:33	*		рН
GS-GSA-MW-13H	2/4/2020 13:33	Temperature	19.29	С
GS-GSA-MW-13H	2/4/2020 13:33	Turbidity	1.52	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9H	2/4/2020 14:25	Conductivity	3327.99	uS/cm
GS-GSA-MW-9H	2/4/2020 14:25	DO	0.32	mg/L
GS-GSA-MW-9H	2/4/2020 14:25	Depth to Water Detail	46.2	ft
GS-GSA-MW-9H	2/4/2020 14:25	Oxidation Reduction Potention	126.6	mv
GS-GSA-MW-9H	2/4/2020 14:25	рН	5.14	pН
GS-GSA-MW-9H	2/4/2020 14:25	Temperature	20.56	С
GS-GSA-MW-9H	2/4/2020 14:25	Turbidity	19	NTU
GS-GSA-MW-9H	2/4/2020 14:30	Conductivity	3290.53	uS/cm
GS-GSA-MW-9H	2/4/2020 14:30	DO	0.25	mg/L
GS-GSA-MW-9H	2/4/2020 14:30	Depth to Water Detail	46.86	ft
GS-GSA-MW-9H	2/4/2020 14:30	Oxidation Reduction Potention	126.58	mv
GS-GSA-MW-9H	2/4/2020 14:30	рН	5.23	рН
GS-GSA-MW-9H	2/4/2020 14:30	Temperature	20.48	С
GS-GSA-MW-9H	2/4/2020 14:30	Turbidity	11.01	NTU
GS-GSA-MW-9H	2/4/2020 14:35	Conductivity	3269.88	uS/cm
GS-GSA-MW-9H	2/4/2020 14:35	DO	0.24	mg/L
GS-GSA-MW-9H	2/4/2020 14:35	Depth to Water Detail	47.74	ft
GS-GSA-MW-9H	2/4/2020 14:35	Oxidation Reduction Potention	122.95	mv
GS-GSA-MW-9H	2/4/2020 14:35	рН	5.29	pН
GS-GSA-MW-9H	2/4/2020 14:35	Temperature	20.47	С
GS-GSA-MW-9H	2/4/2020 14:35	Turbidity	6.39	NTU
GS-GSA-MW-9H	2/4/2020 14:40	Conductivity	3256.23	uS/cm
GS-GSA-MW-9H	2/4/2020 14:40	DO	0.22	mg/L
GS-GSA-MW-9H	2/4/2020 14:40	Depth to Water Detail	47.75	ft
GS-GSA-MW-9H	2/4/2020 14:40	Oxidation Reduction Potention	120.41	mv
GS-GSA-MW-9H	2/4/2020 14:40	рН	5.33	рН
GS-GSA-MW-9H	2/4/2020 14:40	Temperature	20.46	С
GS-GSA-MW-9H	2/4/2020 14:40	Turbidity	4.83	NTU
GS-GSA-MW-9H	2/4/2020 14:45	Conductivity	3250.54	
GS-GSA-MW-9H	2/4/2020 14:45	DO	0.22	mg/L
GS-GSA-MW-9H	2/4/2020 14:45	Depth to Water Detail	47.78	
GS-GSA-MW-9H	2/4/2020 14:45	Oxidation Reduction Potention	118.73	mv
GS-GSA-MW-9H	2/4/2020 14:45	рН	5.34	pН
GS-GSA-MW-9H	2/4/2020 14:45	Temperature	20.45	С
GS-GSA-MW-9H	2/4/2020 14:45	Turbidity	3.91	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8	2/4/2020 16:17	Conductivity	3584.9	uS/cm
GS-GSA-MW-8	2/4/2020 16:17		0.43	mg/L
GS-GSA-MW-8	2/4/2020 16:17	Depth to Water Detail	75.34	ft
GS-GSA-MW-8	2/4/2020 16:17	Oxidation Reduction Potention	-33.83	mv
GS-GSA-MW-8	2/4/2020 16:17	рН	6.85	pН
GS-GSA-MW-8	2/4/2020 16:17	Temperature	19.92	С
GS-GSA-MW-8	2/4/2020 16:17	Turbidity	1.27	NTU
GS-GSA-MW-8	2/4/2020 16:22	Conductivity	3558.08	uS/cm
GS-GSA-MW-8	2/4/2020 16:22	DO	0.33	mg/L
GS-GSA-MW-8	2/4/2020 16:22	Depth to Water Detail	75.41	ft
GS-GSA-MW-8	2/4/2020 16:22	Oxidation Reduction Potention	-41.22	mv
GS-GSA-MW-8	2/4/2020 16:22	рН	6.85	рН
GS-GSA-MW-8	2/4/2020 16:22	Temperature	19.9	С
GS-GSA-MW-8	2/4/2020 16:22	Turbidity	1.24	NTU
GS-GSA-MW-8	2/4/2020 16:27	Conductivity	3481.44	uS/cm
GS-GSA-MW-8	2/4/2020 16:27		0.3	mg/L
GS-GSA-MW-8	2/4/2020 16:27	Depth to Water Detail	75.45	ft
GS-GSA-MW-8	2/4/2020 16:27	Oxidation Reduction Potention	-46.73	mv
GS-GSA-MW-8	2/4/2020 16:27	рН	6.85	pН
GS-GSA-MW-8	2/4/2020 16:27	Temperature	19.88	С
GS-GSA-MW-8	2/4/2020 16:27	Turbidity	1.73	NTU
GS-GSA-MW-8	2/4/2020 16:32	Conductivity	3470.58	uS/cm
GS-GSA-MW-8	2/4/2020 16:32	DO	0.29	mg/L
GS-GSA-MW-8	2/4/2020 16:32	Depth to Water Detail	75.48	
GS-GSA-MW-8	2/4/2020 16:32	Oxidation Reduction Potention	-47.9	mv
GS-GSA-MW-8	2/4/2020 16:32		6.85	рН
GS-GSA-MW-8	2/4/2020 16:32	Temperature	19.85	
GS-GSA-MW-8	2/4/2020 16:32	Turbidity	1.6	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	2/5/2020 11:00	Conductivity	1720.02	uS/cm
GS-GSA-MW-8V	2/5/2020 11:00	DO	0.74	mg/L
GS-GSA-MW-8V	2/5/2020 11:00	Depth to Water Detail	87.33	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-192.36	mv
GS-GSA-MW-8V	2/5/2020 11:00	рН	7.53	рН
GS-GSA-MW-8V	2/5/2020 11:00	Temperature	20.03	С
GS-GSA-MW-8V	2/5/2020 11:00	Turbidity	1.6	NTU
GS-GSA-MW-8V	2/5/2020 11:05	Conductivity	1727.33	uS/cm
GS-GSA-MW-8V	2/5/2020 11:05	DO	0.6	mg/L
GS-GSA-MW-8V	2/5/2020 11:05	Depth to Water Detail	88.46	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-216.01	mv
GS-GSA-MW-8V	2/5/2020 11:05	рН	7.53	рН
GS-GSA-MW-8V	2/5/2020 11:05	Temperature	20.06	С
GS-GSA-MW-8V	2/5/2020 11:05	Turbidity	0.86	NTU
GS-GSA-MW-8V	2/5/2020 11:10	Conductivity	1731.3	uS/cm
GS-GSA-MW-8V	2/5/2020 11:10	DO	0.55	mg/L
GS-GSA-MW-8V	2/5/2020 11:10	Depth to Water Detail	89.23	ft
GS-GSA-MW-8V	2/5/2020 11:10	Oxidation Reduction Potention	-234.99	mv
GS-GSA-MW-8V	2/5/2020 11:10	рН	7.53	рН
GS-GSA-MW-8V	2/5/2020 11:10	Temperature	20.09	С
GS-GSA-MW-8V	2/5/2020 11:10	Turbidity	0.73	NTU
GS-GSA-MW-8V	2/5/2020 11:15	Conductivity	1737.84	uS/cm
GS-GSA-MW-8V	2/5/2020 11:15	DO	0.53	mg/L
GS-GSA-MW-8V		Depth to Water Detail	90.24	ft
GS-GSA-MW-8V	2/5/2020 11:15	Oxidation Reduction Potention	-250.49	mv
GS-GSA-MW-8V	2/5/2020 11:15	рН	7.54	рН
GS-GSA-MW-8V	2/5/2020 11:15	Temperature	20.11	С
GS-GSA-MW-8V	2/5/2020 11:15	Turbidity	0.73	NTU
GS-GSA-MW-8V	2/5/2020 11:20	Conductivity	1724.38	uS/cm
GS-GSA-MW-8V	2/5/2020 11:20	DO	0.53	mg/L
GS-GSA-MW-8V	2/5/2020 11:20	Depth to Water Detail	91.04	ft
GS-GSA-MW-8V	2/5/2020 11:20	Oxidation Reduction Potention	-262.79	mv
GS-GSA-MW-8V	2/5/2020 11:20	рН	7.54	pН
GS-GSA-MW-8V	2/5/2020 11:20	Temperature	20.21	С
GS-GSA-MW-8V	2/5/2020 11:20	Turbidity	0.93	NTU
GS-GSA-MW-8V	2/5/2020 11:25	· ·	1713.36	uS/cm
GS-GSA-MW-8V	2/5/2020 11:25	DO	0.54	mg/L
GS-GSA-MW-8V	2/5/2020 11:25	Depth to Water Detail	91.5	ft
GS-GSA-MW-8V	2/5/2020 11:25	Oxidation Reduction Potention	-272.96	mv
GS-GSA-MW-8V	2/5/2020 11:25	рН	7.54	рН
GS-GSA-MW-8V	2/5/2020 11:25	Temperature	20.17	
GS-GSA-MW-8V	2/5/2020 11:25		1.15	NTU
GS-GSA-MW-8V	2/5/2020 11:30		1710.86	
GS-GSA-MW-8V	2/5/2020 11:30	DO	0.55	mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	2/5/2020 11:30	Depth to Water Detail	92.23	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-279.54	
GS-GSA-MW-8V	2/5/2020 11:30	рН	7.54	рН
GS-GSA-MW-8V	2/5/2020 11:30	Temperature	20.19	C
GS-GSA-MW-8V	2/5/2020 11:30			NTU
GS-GSA-MW-8V	2/5/2020 11:35	Conductivity	1708.77	uS/cm
GS-GSA-MW-8V	2/5/2020 11:35	DO	0.53	mg/L
GS-GSA-MW-8V	2/5/2020 11:35	Depth to Water Detail	92.75	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-285.48	mv
GS-GSA-MW-8V	2/5/2020 11:35	рН	7.55	рН
GS-GSA-MW-8V	2/5/2020 11:35	Temperature	20.16	C
GS-GSA-MW-8V	2/5/2020 11:35	Turbidity		NTU
GS-GSA-MW-8V	2/5/2020 11:40	Conductivity	1709.3	uS/cm
GS-GSA-MW-8V	2/5/2020 11:40	DO	0.52	mg/L
GS-GSA-MW-8V	2/5/2020 11:40	Depth to Water Detail	93.21	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-288.54	mv
GS-GSA-MW-8V	2/5/2020 11:40	рН	7.56	рН
GS-GSA-MW-8V	2/5/2020 11:40	Temperature	20.26	
GS-GSA-MW-8V	2/5/2020 11:40	Turbidity	1.87	NTU
GS-GSA-MW-8V	2/5/2020 11:45	Conductivity	1710.2	uS/cm
GS-GSA-MW-8V	2/5/2020 11:45	DO	0.52	mg/L
GS-GSA-MW-8V	2/5/2020 11:45	Depth to Water Detail	93.7	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-289.93	mv
GS-GSA-MW-8V	2/5/2020 11:45	рН	7.57	рН
GS-GSA-MW-8V	2/5/2020 11:45	Temperature	20.31	С
GS-GSA-MW-8V	2/5/2020 11:45		1.97	NTU
GS-GSA-MW-8V	2/5/2020 11:50	Conductivity	1711.14	uS/cm
GS-GSA-MW-8V	2/5/2020 11:50	DO	0.51	mg/L
GS-GSA-MW-8V	2/5/2020 11:50	Depth to Water Detail	94.45	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-290.39	mv
GS-GSA-MW-8V	2/5/2020 11:50	рН	7.57	рН
GS-GSA-MW-8V	2/5/2020 11:50	Temperature	20.36	С
GS-GSA-MW-8V	2/5/2020 11:50	Turbidity	1.7	NTU
GS-GSA-MW-8V	2/5/2020 11:55	Conductivity	1711.67	uS/cm
GS-GSA-MW-8V	2/5/2020 11:55	DO	0.5	mg/L
GS-GSA-MW-8V	2/5/2020 11:55	Depth to Water Detail	94.71	ft
GS-GSA-MW-8V	2/5/2020 11:55	Oxidation Reduction Potention	-290.98	mv
GS-GSA-MW-8V	2/5/2020 11:55	рН	7.58	рН
GS-GSA-MW-8V	2/5/2020 11:55	Temperature	20.31	С
GS-GSA-MW-8V	2/5/2020 11:55	Turbidity	2.3	NTU
GS-GSA-MW-8V	2/5/2020 12:00	· · · · · · · · · · · · · · · · · · ·	1714.5	uS/cm
GS-GSA-MW-8V	2/5/2020 12:00	DO	0.51	mg/L
GS-GSA-MW-8V	2/5/2020 12:00	Depth to Water Detail	95.38	ft
GS-GSA-MW-8V	2/5/2020 12:00	Oxidation Reduction Potention	-291.22	mv

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	2/5/2020 12:00	рН	7.58	рН
GS-GSA-MW-8V	2/5/2020 12:00	Temperature	20.33	
GS-GSA-MW-8V	2/5/2020 12:00	Turbidity	1.89	NTU
GS-GSA-MW-8V	2/5/2020 12:05	Conductivity	1714.32	uS/cm
GS-GSA-MW-8V	2/5/2020 12:05	DO	0.5	mg/L
GS-GSA-MW-8V	2/5/2020 12:05	Depth to Water Detail	95.75	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-291.54	mv
GS-GSA-MW-8V	2/5/2020 12:05	рН	7.58	рН
GS-GSA-MW-8V	2/5/2020 12:05	Temperature	20.37	С
GS-GSA-MW-8V	2/5/2020 12:05	Turbidity	5.52	NTU
GS-GSA-MW-8V	2/5/2020 12:10	Conductivity	1712.52	uS/cm
GS-GSA-MW-8V	2/5/2020 12:10	DO	0.5	mg/L
GS-GSA-MW-8V	2/5/2020 12:10	Depth to Water Detail	96.28	ft
GS-GSA-MW-8V	2/5/2020 12:10	Oxidation Reduction Potention	-293.12	mv
GS-GSA-MW-8V	2/5/2020 12:10	рН	7.58	рН
GS-GSA-MW-8V	2/5/2020 12:10	Temperature	20.38	С
GS-GSA-MW-8V	2/5/2020 12:10	Turbidity	1.86	NTU
GS-GSA-MW-8V	2/5/2020 12:15	Conductivity	1711.56	uS/cm
GS-GSA-MW-8V	2/5/2020 12:15	DO	0.49	mg/L
GS-GSA-MW-8V	2/5/2020 12:15	Depth to Water Detail	96.47	ft
GS-GSA-MW-8V	2/5/2020 12:15	Oxidation Reduction Potention	-294.79	mv
GS-GSA-MW-8V	2/5/2020 12:15	рН	7.56	рН
GS-GSA-MW-8V	2/5/2020 12:15	Temperature	20.39	С
GS-GSA-MW-8V	2/5/2020 12:15	Turbidity	1.7	NTU
GS-GSA-MW-8V	2/5/2020 12:20	Conductivity	1711.86	uS/cm
GS-GSA-MW-8V	2/5/2020 12:20	DO	0.49	mg/L
GS-GSA-MW-8V	2/5/2020 12:20	Depth to Water Detail	97.04	ft
GS-GSA-MW-8V	2/5/2020 12:20	Oxidation Reduction Potention	-296.3	mv
GS-GSA-MW-8V	2/5/2020 12:20		7.56	pН
GS-GSA-MW-8V	2/5/2020 12:20	Temperature	20.4	C
GS-GSA-MW-8V	2/5/2020 12:20	Turbidity	1.54	NTU
GS-GSA-MW-8V	2/5/2020 12:25	Conductivity	1714.47	uS/cm
GS-GSA-MW-8V	2/5/2020 12:25		0.5	mg/L
GS-GSA-MW-8V	2/5/2020 12:25	Depth to Water Detail	97.39	ft
GS-GSA-MW-8V	2/5/2020 12:25	Oxidation Reduction Potention	-297.89	mv
GS-GSA-MW-8V	2/5/2020 12:25	рН	7.55	рН
GS-GSA-MW-8V	2/5/2020 12:25	Temperature	20.4	С
GS-GSA-MW-8V	2/5/2020 12:25		1.62	NTU
GS-GSA-MW-8V	2/5/2020 12:30	Conductivity		uS/cm
GS-GSA-MW-8V	2/5/2020 12:30			mg/L
GS-GSA-MW-8V	2/5/2020 12:30	Depth to Water Detail	97.77	ft
GS-GSA-MW-8V	2/5/2020 12:30	Oxidation Reduction Potention	-299.16	mv
GS-GSA-MW-8V	2/5/2020 12:30	рН	7.54	рН
GS-GSA-MW-8V	2/5/2020 12:30	Temperature	20.39	C

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	2/5/2020 12:30	Turbidity	1.8	NTU
GS-GSA-MW-8V	2/5/2020 12:35	Conductivity	1720.41	uS/cm
GS-GSA-MW-8V	2/5/2020 12:35	DO	0.51	mg/L
GS-GSA-MW-8V	2/5/2020 12:35	Depth to Water Detail	97.82	ft
GS-GSA-MW-8V	2/5/2020 12:35	Oxidation Reduction Potention	-301.05	mv
GS-GSA-MW-8V	2/5/2020 12:35		7.52	рН
GS-GSA-MW-8V	2/5/2020 12:35	Temperature	20.36	C
GS-GSA-MW-8V	2/5/2020 12:35	Turbidity	1.7	NTU
GS-GSA-MW-8V	2/5/2020 12:40	Conductivity	1724.08	uS/cm
GS-GSA-MW-8V	2/5/2020 12:40	DO	0.5	mg/L
GS-GSA-MW-8V	2/5/2020 12:40	Depth to Water Detail	98.46	ft
GS-GSA-MW-8V	2/5/2020 12:40	Oxidation Reduction Potention	-302.31	mv
GS-GSA-MW-8V	2/5/2020 12:40	рН	7.51	рН
GS-GSA-MW-8V	2/5/2020 12:40	Temperature	20.3	С
GS-GSA-MW-8V	2/5/2020 12:40		1.68	NTU
GS-GSA-MW-8V	2/5/2020 12:45	Conductivity	1727.4	uS/cm
GS-GSA-MW-8V	2/5/2020 12:45	DO	0.5	mg/L
GS-GSA-MW-8V	2/5/2020 12:45	Depth to Water Detail	98.55	
GS-GSA-MW-8V		Oxidation Reduction Potention	-303.75	mv
GS-GSA-MW-8V	2/5/2020 12:45	рН	7.51	рН
GS-GSA-MW-8V	2/5/2020 12:45	Temperature	20.4	С
GS-GSA-MW-8V	2/5/2020 12:45		1.59	NTU
GS-GSA-MW-8V	2/5/2020 12:50	Conductivity	1729.72	uS/cm
GS-GSA-MW-8V	2/5/2020 12:50	DO	0.51	mg/L
GS-GSA-MW-8V	2/5/2020 12:50	Depth to Water Detail	99.1	
GS-GSA-MW-8V	2/5/2020 12:50	Oxidation Reduction Potention	-305.44	mv
GS-GSA-MW-8V	2/5/2020 12:50	рН	7.51	рН
GS-GSA-MW-8V	2/5/2020 12:50	Temperature	20.36	С
GS-GSA-MW-8V	2/5/2020 12:50		1.54	NTU
GS-GSA-MW-8V	2/5/2020 12:55	Conductivity	1731.58	uS/cm
GS-GSA-MW-8V	2/5/2020 12:55		0.5	mg/L
GS-GSA-MW-8V	2/5/2020 12:55	Depth to Water Detail	99.23	ft
GS-GSA-MW-8V	2/5/2020 12:55	Oxidation Reduction Potention	-306.73	mv
GS-GSA-MW-8V	2/5/2020 12:55	рН	7.5	рН
GS-GSA-MW-8V	2/5/2020 12:55	Temperature	20.35	С
GS-GSA-MW-8V	2/5/2020 12:55	Turbidity	1.42	NTU
GS-GSA-MW-8V	2/5/2020 13:00	-	1733.72	uS/cm
GS-GSA-MW-8V	2/5/2020 13:00	·	0.49	mg/L
GS-GSA-MW-8V	2/5/2020 13:00	Depth to Water Detail	99.44	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-306.58	mv
GS-GSA-MW-8V	2/5/2020 13:00		7.49	
GS-GSA-MW-8V	2/5/2020 13:00	Temperature	20.36	•
GS-GSA-MW-8V	2/5/2020 13:00	•	1.44	NTU
GS-GSA-MW-8V	2/5/2020 13:05		1734.19	uS/cm

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	2/5/2020 13:05	DO		mg/L
GS-GSA-MW-8V	2/5/2020 13:05	Depth to Water Detail	99.65	ft
GS-GSA-MW-8V	2/5/2020 13:05	Oxidation Reduction Potention	-308.18	mv
GS-GSA-MW-8V	2/5/2020 13:05	рН	7.49	
GS-GSA-MW-8V	2/5/2020 13:05	Temperature	20.33	C
GS-GSA-MW-8V	2/5/2020 13:05	Turbidity	1.39	NTU
GS-GSA-MW-8V	2/5/2020 13:10	Conductivity	1737.49	uS/cm
GS-GSA-MW-8V	2/5/2020 13:10	DO	0.5	mg/L
GS-GSA-MW-8V	2/5/2020 13:10	Depth to Water Detail	100.28	ft
GS-GSA-MW-8V	2/5/2020 13:10	Oxidation Reduction Potention	-308.87	mv
GS-GSA-MW-8V	2/5/2020 13:10	рН	7.49	рН
GS-GSA-MW-8V	2/5/2020 13:10	Temperature	20.31	C
GS-GSA-MW-8V	2/5/2020 13:10	Turbidity	1.23	NTU
GS-GSA-MW-8V	2/5/2020 13:15	Conductivity	1738.58	uS/cm
GS-GSA-MW-8V	2/5/2020 13:15		0.49	mg/L
GS-GSA-MW-8V	2/5/2020 13:15	Depth to Water Detail	100.38	ft
GS-GSA-MW-8V	2/5/2020 13:15	Oxidation Reduction Potention	-308.91	mv
GS-GSA-MW-8V	2/5/2020 13:15	1	7.49	
GS-GSA-MW-8V	2/5/2020 13:15	Temperature	20.27	C
GS-GSA-MW-8V	2/5/2020 13:15		1.41	NTU
GS-GSA-MW-8V	2/5/2020 13:20	Conductivity	1739.73	uS/cm
GS-GSA-MW-8V	2/5/2020 13:20	DO	0.51	mg/L
GS-GSA-MW-8V		Depth to Water Detail	100.51	ft
GS-GSA-MW-8V	2/5/2020 13:20	Oxidation Reduction Potention	-309.03	mv
GS-GSA-MW-8V	2/5/2020 13:20	*	7.48	рН
GS-GSA-MW-8V	2/5/2020 13:20	Temperature	20.25	С
GS-GSA-MW-8V	2/5/2020 13:20	Turbidity	1.21	NTU

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

Field Case Narrative



Gorgas Gypsum Pond

2020 Compliance Event 2

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

Trucks moving material in the area caused dusty conditions during pumping and sampling at wells MW-4, MW-4V and PZ-17.

No field readings for turbidity and depth to water were recorded for MW-9V at the 90 minute mark due to attempts to resolve Bluetooth connectivity issues.

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: WMWGORG_1289

Project/Site: Gorgas Gypsum

Parrish, AL 35580

For: Southern Company Services

3535 Colonnade Parkway Birmingham, AL 35243

Attention: Dustin Brooks & Greg Dyer

Released By: Laura Midkiff

lbmidkif@southernco.com

(205) 664-6197



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

August 21, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on August 06, 2020. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2021

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

Sincerely,

Quality Control: Laura Midkiff Control: Laura Midkiff Control: Laura Midkiff Control: Laura Midkiff Control: Co

T. Durant Supervision:

Maske





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.



Case Narrative

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



Total Metals ICP

Gorgas Gypsum

WMWGORG_1289

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

Sample ID	Batch ID	Project ID
BA14541	678865	WMWGORG_1289
BA14542	678865	WMWGORG_1289
BA14543	678865	WMWGORG_1289
BA14544	678865	WMWGORG_1289
BA14545	678865	WMWGORG_1289
BA14546	678865	WMWGORG_1289
BA14547	678865	WMWGORG_1289
BA14548	678865	WMWGORG_1289
BA14549	678865	WMWGORG_1289
BA14550	678865	WMWGORG_1289
BA14551	678866	WMWGORG_1289
BA14552	678866	WMWGORG_1289
BA14553	678866	WMWGORG_1289
BA14554	678866	WMWGORG_1289
BA14555	678866	WMWGORG_1289
BA14556	678866	WMWGORG_1289
BA14557	678866	WMWGORG_1289
BA14558	678866	WMWGORG_1289
BA14559	678866	WMWGORG_1289
BA14560	678866	WMWGORG_1289
BA14561	678867	WMWGORG_1289
BA14562	678867	WMWGORG_1289
BA14563	678867	WMWGORG_1289
BA14564	678867	WMWGORG_1289
BA14565	678867	WMWGORG_1289
BA14566	678867	WMWGORG_1289
BA14567	678867	WMWGORG_1289
BA14568	678867	WMWGORG_1289
BA14569	678867	WMWGORG_1289
BA14570	678867	WMWGORG_1289
BA14571	678868	WMWGORG_1289

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



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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
 - BA14550 MS/MSD Spike level is less than 30% of sample nominal concentration for Calcium, Iron,
 Magnesium, and Sodium.
 - Ba14560 MS/MSD Spike level is less than 30% of sample nominal concentration for Calcium, Iron, and Magnesium.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

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



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

Sample ID	<u>Analyte</u>	Dilution Factor
BA14542	Calcium, Iron, Magnesium	10.15
BA14543	Calcium, Magnesium, Sodium	10.15
BA14544	Calcium, Iron, Magnesium, Sodium	10.15
BA14545	Calcium, Iron, Magnesium, Sodium	10.15
BA14547	Sodium	10.15
BA14548	Calcium, Iron	20.3
BA14549	Calcium, Iron, Magnesium	101.5
BA14550	Calcium, Iron, Magnesium, Sodium	101.5
BA14551	Calcium, Iron, Magnesium, Sodium	101.5
BA14552	Sodium	10.15
BA14553	Calcium, Iron, Magnesium, Sodium	20.3
BA14554	Calcium, Magnesium	10.15
BA14555	Calcium, Iron, Magnesium, Sodium	101.5
BA14557	Calcium, Magnesium	10.15
BA14558	Calcium, Magnesium	10.15
BA14559	Calcium, Iron, Magnesium	10.15
BA14560	Calcium, Iron, Magnesium, Sodium	20.3
BA14561	Calcium, Magnesium, Sodium	10.15
BA14562	Calcium, Magnesium, Sodium	10.15
BA14563	Calcium, Iron, Magnesium, Sodium	20.3
BA14564	Calcium, Iron, Magnesium, Sodium	10.15
BA14565	Calcium, Magnesium, Sodium	20.3
BA14566	Calcium, Magnesium	20.3
BA14567	Calcium, Iron, Magnesium	10.15
BA14568	Calcium, Iron, Magnesium	10.15
BA14569	Calcium, Iron, Magnesium	20.3

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

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



Dissolved Metals ICP

Gorgas Gypsum

WMWGORG_1289

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

Sample ID	Batch ID	Project ID
BA14542	678835	WMWGORG_1289
BA14543	678835	WMWGORG_1289
BA14544	678835	WMWGORG_1289
BA14545	678835	WMWGORG_1289
BA14547	678835	WMWGORG_1289
BA14548	678835	WMWGORG_1289
BA14549	678835	WMWGORG_1289
BA14550	678835	WMWGORG_1289
BA14551	678835	WMWGORG_1289
BA14552	678835	WMWGORG_1289
BA14553	678836	WMWGORG_1289
BA14554	678836	WMWGORG_1289
BA14555	678836	WMWGORG_1289
BA14557	678836	WMWGORG_1289
BA14558	678836	WMWGORG_1289
BA14559	678836	WMWGORG_1289
BA14560	678836	WMWGORG_1289
BA14561	678836	WMWGORG_1289
BA14562	678836	WMWGORG_1289
BA14563	678836	WMWGORG_1289
BA14564	678837	WMWGORG_1289
BA14565	678837	WMWGORG_1289
BA14566	678837	WMWGORG_1289
BA14567	678837	WMWGORG_1289
BA14568	678837	WMWGORG_1289
BA14569	678837	WMWGORG_1289

- 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.

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



General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
 - o BA14563 and BA14569 MS/MSD spike levels for Iron are less than 30% of the sample nominal concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

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



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

Sample ID	<u>Analyte</u>	Dilution Factor
BA14542	Iron	101.5
BA14544	Iron	10.15
BA14545	Iron	10.15
BA14548	Iron	101.5
BA14549	Iron	101.5
BA14550	Iron	101.5
BA14551	Iron	101.5
BA14553	Iron	10.15
BA14555	Iron	101.5
BA14559	Iron	10.15
BA14560	Iron	10.15
BA14563	Iron	101.5
BA14564	Iron	101.5
BA14567	Iron	10.15
BA14568	Iron	10.15
BA14569	Iron	101.5

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

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



Total Metals ICPMS

Gorgas Gypsum

WMWGORG_1289

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

Sample ID	Batch ID	Project ID
BA14541	679198	WMWGORG_1289
BA14542	679198	WMWGORG_1289
BA14543	679198	WMWGORG_1289
BA14544	679198	WMWGORG_1289
BA14545	679198	WMWGORG_1289
BA14546	679198	WMWGORG_1289
BA14547	679198	WMWGORG_1289
BA14548	679198	WMWGORG_1289
BA14549	679198	WMWGORG_1289
BA14550	679198	WMWGORG_1289
BA14551	679199	WMWGORG_1289
BA14552	679199	WMWGORG_1289
BA14553	679199	WMWGORG_1289
BA14554	679199	WMWGORG_1289
BA14555	679199	WMWGORG_1289
BA14556	679199	WMWGORG_1289
BA14557	679199	WMWGORG_1289
BA14558	679199	WMWGORG_1289
BA14559	679199	WMWGORG_1289
BA14560	679199	WMWGORG_1289
BA14561	679200	WMWGORG_1289
BA14562	679200	WMWGORG_1289
BA14563	679200	WMWGORG_1289
BA14564	679200	WMWGORG_1289
BA14565	679200	WMWGORG_1289
BA14566	679200	WMWGORG_1289
BA14567	679200	WMWGORG_1289
BA14568	679200	WMWGORG_1289
BA14569	679200	WMWGORG_1289
BA14570	679200	WMWGORG_1289
BA14571	679201	WMWGORG_1289

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



- 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, except for the following:
 - Batches 679199-679201 CCV for potassium failed on 08/10/20. All three batches were rerun for Potassium on 8/11/20 with passing CCV.
 - Batch 679201 CCV for Chromium failed on 08/10/20. The batch was rerun for Chromium on 8/11/20 with passing CCV.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
 - BA14550 and BA14560 MS/MSD Spike levels are less than 30% of sample nominal concentrations for Manganese.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

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

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

Sample ID	<u>Analyte</u>	Dilution Factor
BA14542	Manganese	10.15
BA14547	Manganese	5.075
BA14548	Manganese	5.075
BA14549	Manganese	10.15
BA14550	Manganese	92.365
BA14551	Manganese	92.365
BA14553	Manganese	92.365
BA14554	Manganese	92.365
BA14555	Manganese	92.365
BA14557	Manganese	10.15
BA14558	Manganese	10.15
BA14559	Manganese	10.15
BA14560	Manganese	92.365
BA14561	Manganese	5.075
BA14562	Manganese	5.075
BA14563	Manganese	92.365
BA14564	Manganese	92.365
BA14565	Manganese	5.075
BA14567	Manganese	10.15
BA14568	Manganese	10.15
BA14569	Manganese	10.15

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

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



Dissolved Metals ICPMS

Gorgas Gypsum

WMWGORG_1289

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

Sample ID	Batch ID	Project ID
BA14542	679139	WMWGORG_1289
BA14543	679139	WMWGORG_1289
BA14544	679139	WMWGORG_1289
BA14545	679139	WMWGORG_1289
BA14547	679139	WMWGORG_1289
BA14548	679139	WMWGORG_1289
BA14549	679139	WMWGORG_1289
BA14550	679139	WMWGORG_1289
BA14551	679139	WMWGORG_1289
BA14552	679139	WMWGORG_1289
BA14553	679140	WMWGORG_1289
BA14554	679140	WMWGORG_1289
BA14555	679140	WMWGORG_1289
BA14557	679140	WMWGORG_1289
BA14558	679140	WMWGORG_1289
BA14559	679140	WMWGORG_1289
BA14560	679140	WMWGORG_1289
BA14561	679140	WMWGORG_1289
BA14562	679140	WMWGORG_1289
BA14563	679140	WMWGORG_1289
BA14564	679141	WMWGORG_1289
BA14565	679141	WMWGORG_1289
BA14566	679141	WMWGORG_1289
BA14567	679141	WMWGORG_1289
BA14568	679141	WMWGORG_1289
BA14569	679141	WMWGORG_1289

- 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.

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



General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
 - BA14563 and BA14569 MS/MSD spike levels for Manganese are less than 30% of the sample nominal concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

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



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

Sample ID	<u>Analyte</u>	Dilution Factor
BA14542	Manganese	10.15
BA14547	Manganese	5.075
BA14548	Manganese	5.075
BA14549	Manganese	10.15
BA14550	Manganese	92.365
BA14551	Manganese	92.365
BA14553	Manganese	92.365
BA14554	Manganese	92.365
BA14555	Manganese	92.365
BA14557	Manganese	10.15
BA14558	Manganese	10.15
BA14559	Manganese	10.15
BA14560	Manganese	92.365
BA14561	Manganese	5.075
BA14562	Manganese	5.075
BA14563	Manganese	92.365
BA14564	Manganese	92.365
BA14565	Manganese	5.075
BA14567	Manganese	10.15
BA14568	Manganese	10.15
BA14569	Manganese	10.15

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

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



Mercury

Gorgas Gypsum

WMWGORG_1289

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

Sample ID	Batch ID	Project ID
BA14541	678939	WMWGORG_1289
BA14542	678939	WMWGORG_1289
BA14543	678939	WMWGORG_1289
BA14544	678939	WMWGORG_1289
BA14545	678939	WMWGORG_1289
BA14546	678939	WMWGORG_1289
BA14547	678939	WMWGORG_1289
BA14548	678939	WMWGORG_1289
BA14549	678939	WMWGORG_1289
BA14550	678939	WMWGORG_1289
BA14551	678940	WMWGORG_1289
BA14552	678940	WMWGORG_1289
BA14553	678940	WMWGORG_1289
BA14554	678940	WMWGORG_1289
BA14555	678940	WMWGORG_1289
BA14556	678940	WMWGORG_1289
BA14557	678940	WMWGORG_1289
BA14558	678940	WMWGORG_1289
BA14559	678940	WMWGORG_1289
BA14560	678940	WMWGORG_1289
BA14561	678941	WMWGORG_1289
BA14562	678941	WMWGORG_1289
BA14563	678941	WMWGORG_1289
BA14564	678941	WMWGORG_1289
BA14565	678941	WMWGORG_1289
BA14566	678941	WMWGORG_1289
BA14567	678941	WMWGORG_1289
BA14568	678941	WMWGORG_1289
BA14569	678941	WMWGORG_1289
BA14570	678941	WMWGORG_1289
BA14571	678942	WMWGORG_1289

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



- 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 Gypsum

WMWGORG_1289

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

Sample ID	Batch ID	Project ID
BA14541	678741	WMWGORG_1289
BA14542	678741	WMWGORG_1289
BA14543	678741	WMWGORG_1289
BA14544	678741	WMWGORG_1289
BA14545	678741	WMWGORG_1289
BA14546	678741	WMWGORG_1289
BA14547	678741	WMWGORG_1289
BA14548	678741	WMWGORG_1289
BA14549	678741	WMWGORG_1289
BA14550	678741	WMWGORG_1289
BA14551	678742	WMWGORG_1289
BA14552	678905	WMWGORG_1289
BA14553	678907	WMWGORG_1289
BA14554	678907	WMWGORG_1289
BA14555	678907	WMWGORG_1289
BA14556	678907	WMWGORG_1289
BA14557	678742	WMWGORG_1289
BA14558	678742	WMWGORG_1289
BA14559	678742	WMWGORG_1289
BA14560	678742	WMWGORG_1289
BA14561	678742	WMWGORG_1289
BA14562	678742	WMWGORG_1289
BA14563	678742	WMWGORG_1289
BA14564	678742	WMWGORG_1289
BA14565	678742	WMWGORG_1289
BA14566	678907	WMWGORG_1289
BA14567	678907	WMWGORG_1289
BA14568	678907	WMWGORG_1289
BA14569	678907	WMWGORG_1289
BA14570	678907	WMWGORG_1289
BA14571	678907	WMWGORG_1289

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



- 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:
 - o BA14541
 - o BA14546
 - o BA14556
 - o BA14570
 - o BA14571

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



Anions

Gorgas Gypsum

WMWGORG_1289

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

Sample ID	Batch ID	Project ID
BA14541	678915, 678998, & 678792	WMWGORG_1289
BA14542	678915, 678998, & 678792	WMWGORG_1289
BA14543	678915, 678998, & 678792	WMWGORG_1289
BA14544	678915, 678998, & 678792	WMWGORG_1289
BA14545	678915, 678998, & 678792	WMWGORG_1289
BA14546	678915, 678998, & 678792	WMWGORG_1289
BA14547	678915, 678998, & 678792	WMWGORG_1289
BA14548	678915, 678998, & 678792	WMWGORG_1289
BA14549	678915, 678998, & 678792	WMWGORG_1289
BA14550	678915, 678998, & 678792	WMWGORG_1289
BA14551	678916, 678999, & 678793	WMWGORG_1289
BA14552	678916, 678999, & 678793	WMWGORG_1289
BA14553	678916, 678999, & 678793	WMWGORG_1289
BA14554	678916, 678999, & 678793	WMWGORG_1289
BA14555	678916, 678999, & 678793	WMWGORG_1289
BA14556	678916, 678999, & 678793	WMWGORG_1289
BA14557	678916, 678999, & 678793	WMWGORG_1289
BA14558	678916, 678999, & 678793	WMWGORG_1289
BA14559	678916, 678999, & 678793	WMWGORG_1289
BA14560	678916, 678999, & 678793	WMWGORG_1289
BA14561	678917, 679000, & 678794	WMWGORG_1289
BA14562	678917, 679000, & 678794	WMWGORG_1289
BA14563	678917, 679000, & 678794	WMWGORG_1289
BA14564	678917, 679000, & 678794	WMWGORG_1289
BA14565	678917, 679000, & 678794	WMWGORG_1289
BA14566	678917, 679000, & 678794	WMWGORG_1289
BA14567	678917, 679000, & 678794	WMWGORG_1289
BA14568	678917, 679000, & 678794	WMWGORG_1289
BA14569	678917, 679000, & 678794	WMWGORG_1289
BA14570	678917, 679000, & 678794	WMWGORG_1289
BA14571	678918, 679001, & 678795	WMWGORG_1289

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



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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met, except for the following:
 - BA14560 matrix spike recovery for Fluoride was outside of the specification limit.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met.

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



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

Sample ID	<u>Analyte</u>	Dilution Factor
BA14542	Sulfate	40
BA14543	Chloride & Sulfate	2 & 16
BA14544	Sulfate	20
BA14545	Sulfate	20
BA14548	Sulfate	20
BA14549	Sulfate	50
BA14550	Chloride & Sulfate	25 & 100
BA14551	Chloride & Sulfate	25 & 200
BA14552	Sulfate	40
BA14553	Chloride & Sulfate	25 & 100
BA14554	Sulfate	40
BA14555	Chloride & Sulfate	25 & 100
BA14557	Sulfate	50
BA14558	Sulfate	50
BA14559	Sulfate	40
BA14560	Sulfate	200
BA14561	Sulfate	40
BA14562	Sulfate	40
BA14563	Sulfate	40
BA14564	Chloride & Sulfate	10 & 100
BA14565	Chloride & Sulfate	10 & 100
BA14566	Sulfate	100
BA14567	Sulfate	40
BA14568	Chloride & Sulfate	8 & 32
BA14569	Chloride & Sulfate	10 & 40

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

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



Alkalinity

Gorgas Gypsum

WMWGORG_1289

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

Batch ID	Project ID
679452 & 679453	WMWGORG_1289
679450 & 679451	WMWGORG_1289
	679452 & 679453 679452 & 679453 679450 & 679451 679450 & 679451

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



- 4. All of the above samples were analyzed Standard Method 2320B, except for the following:
 - a. Samples BA14542, BA14549, BA14554, BA14567, and BA14568 are reported as NA due to the initial pH being less than the 4.5pH titration end point.
- 5. All samples were prepared and analyzed within the established hold times.
- 6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

Certificate Of Analysis



Description: Gorgas Gypsum Equipment Blank-2Location Code:WMWGORGEBCollected:8/3/20 10:15

Customer ID:

Submittal Date: 8/6/20 11:00

Laboratory ID Number: BA14541

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method: El	PA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 09:3	34 1	1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 09:3	34 1	1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	8/10/20 15:00	8/12/20 09:3	34 1	1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	8/10/20 15:00	8/12/20 09:3	34 1	1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	8/10/20 15:00	8/12/20 09:3	34 1	1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	8/10/20 15:00	8/12/20 09:3	34 1	1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method: El	PA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 10:5	59 1	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS							
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:0)1 1		Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW							
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	20 1		Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 12:29	8/10/20 12:2	29 1	I	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 10:45	8/11/20 10:4	15 1	l	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 11:27	8/7/20 11:27	,	1	Not Detected	ma/L	0.50	1	U

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

Comments:

Batch QC Summary



Customer Account: WMWGORGEB **Sample Date:** 8/3/20 10:15

Customer ID:

Delivery Date: 8/6/20 11:00

Description: Gorgas Gypsum Equipment Blank-2

Laboratory ID Number: BA14541

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20
BA14550 Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550 Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550 Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550 Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14550 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20
BA14550 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20
BA14550 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550 Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550 Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550 Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20

Comments:

Batch QC Summary



Customer Account: WMWGORGEB

Sample Date:

8/3/20 10:15

Customer ID:

Delivery Date:

8/6/20 11:00

Description: Gorgas Gypsum Equipment Blank-2

Laboratory ID Number: BA14541

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	l Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102 8	30 to 120	7.71	20
BA14550	Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5 8	30 to 120	1.63	20
BA14550	Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60			0.00	5
BA14550	Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4 8	30 to 120	0.988	20

Comments:

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-18Location Code:WMWGORGCollected:8/3/20 11:00

Customer ID:

Submittal Date: 8/6/20 11:00

Laboratory ID Number: BA14542

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	yst: RDA		Preparati	ion Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 09:3	7 1.015	0.0671	mg/L	0.03	0.1	J
* Calcium, Total	8/10/20 15:00	8/12/20 12:0	1 10.15	106	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 12:0	1 10.15	16.4	mg/L	0.203	0.5075	
* Lithium, Total	8/10/20 15:00	8/12/20 09:3	7 1.015	0.422	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:0	1 10.15	71.8	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 09:3	7 1.015	17.0	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Analy	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:2	8 101.5	17.4	mg/L	2.03	5.075	
Analytical Method: EPA 200.8	Analy	yst: DLJ		Preparati	ion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.00113	mg/L	0.0008	0.003	J
* Arsenic, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.0114	mg/L	0.001	0.005	
* Barium, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.0111	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.00829	mg/L	0.0006	0.003	
* Cadmium, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.00120	mg/L	0.0003	0.001	
* Chromium, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.00315	mg/L	0.002	0.01	J
* Cobalt, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.156	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.00366	mg/L	0.001	0.005	J
 Molybdenum, Total 	8/7/20 12:54	8/10/20 11:0	2 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	2.82	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 13:5	7 10.15	4.94	mg/L	0.01015	0.05075	
* Selenium, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	0.00616	mg/L	0.002	0.01	J
* Thallium, Total	8/7/20 12:54	8/10/20 11:0	2 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Analy	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:2	0 10.15	4.90	mg/L	0.01015	0.05075	
Analytical Method: EPA 245.1	Analy	yst: GAS						
Mercury, Total by CVAA	8/11/20 09:20	•	3 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00	•	5 1	NA	mg/L		0.10	
Analytical Method: SM 2540C		yst: TJW	•		Č			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	1210	mg/L		83.3	

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

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-18

Location Code:

WMWGORG 8/3/20 11:00

Collected:

Customer ID: Submittal Date:

8/6/20 11:00

Laboratory ID Number: BA14542

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	NA	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	NA	mg/L			
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 12:30	8/10/20 12:3	30	1	4.55	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 10:46	8/11/20 10:4	6	1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 11:28	8/7/20 11:28	3	40	729	mg/L	20.00	40	
Analytical Method: Field Measurements	Anal	yst: DKG							
Conductivity	8/3/20 10:56	8/3/20 10:56	;		1297.60	uS/cm			FA
рН	8/3/20 10:56	8/3/20 10:56	;		4.09	SU			FA
Temperature	8/3/20 10:56	8/3/20 10:56	5		21.91	С			FA
Turbidity	8/3/20 10:56	8/3/20 10:56	5		0.86	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 11:00

Customer ID:

Delivery Date: 8/6/20 11:00

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BA14542

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550 Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14552 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14550 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20
BA14550 Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550 Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550 Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550 Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550 Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550 Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14552 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14550 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20
BA14550 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 11:00

Customer ID:

Delivery Date: 8/6/20 11:00

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BA14542

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4 8	30 to 120	0.988	20
BA14550	Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102 8	30 to 120	7.71	20
BA14550	Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5 8	30 to 120	1.63	20
BA14550	Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60			0.00	5
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-19Location Code:WMWGORGCollected:8/3/20 12:50

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14543

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	st: RDA		Preparati	ion Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 09:40	1.015	0.0553	mg/L	0.03	0.1	J
* Calcium, Total	8/10/20 15:00	8/12/20 12:04	4 10.15	88.0	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 09:40	1.015	3.15	mg/L	0.02	0.05	
* Lithium, Total	8/10/20 15:00	8/12/20 09:40	1.015	0.0753	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:04	4 10.15	42.2	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 12:04	4 10.15	94.2	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	Analy	st: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 10:5	1.015	3.17	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	Analy	st: DLJ		Preparati	ion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	0.00279	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	0.0470	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	8.26	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	0.900	mg/L	0.001	0.005	
* Selenium, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:0	5 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Analy	st: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/10/20 10:32	2 1.015	0.857	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	Analy	st: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:00	6 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Analy	/st: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00		5 1	393	mg/L		0.1	
Analytical Method: SM 2540C	Analy	/st: TJW						
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:20	0 1	740	mg/L		50	

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

Certificate Of Analysis



FΑ

Description: Gorgas Gypsum - PZ-19

Turbidity

Location Code:

WMWGORG 8/3/20 12:50

Collected: **Customer ID:**

3.77

Submittal Date:

NTU

8/6/20 11:01

Laboratory ID Number: BA14543				Subn	nittai Date:	6/6/20 11:0)	
Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Ana	lyst: JAG						
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5 1	393	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5 1	0.18	mg/L			
Analytical Method: SM4500Cl E	Ana	lyst: JCC						
* Chloride	8/10/20 12:31	8/10/20 12:3	1 2	21.7	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	Ana	lyst: JCC						
* Fluoride	8/11/20 10:47	8/11/20 10:4	7 1	0.180	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Ana	lyst: JCC						
* Sulfate	8/7/20 11:29	8/7/20 11:29	16	210	mg/L	8.00	16	
Analytical Method: Field Measurements	Ana	lyst: DKG						
Conductivity	8/3/20 12:46	8/3/20 12:46		1176.09	uS/cm			FA
рН	8/3/20 12:46	8/3/20 12:46		6.32	SU			FA
Temperature	8/3/20 12:46	8/3/20 12:46		18.97	С			FA

8/3/20 12:46

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 8/19/2020

8/3/20 12:46

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 12:50

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BA14543

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20
BA14550 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20
BA14550 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550 Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14552 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14550 Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550 Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550 Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550 Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550 Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550 Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14552 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14550 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20

Batch QC Summary



Customer Account: WMWGORG

Customer ID:

Sample Date: 8/3/20 12:50

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BA14543

			MB			Sample		Standard	Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec Limit	Prec	<u>Li</u> mit
BA14550 Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4 80 to 120	0.988	20
BA14550 Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102 80 to 120	7.71	20
BA14550 Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5 80 to 120	1.63	20
BA14550 Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60		0.00	5
BA14563 Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0		2.72	10

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-20Location Code:WMWGORGCollected:8/3/20 13:59

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14544

Name	Prepared	Analyzed \	/io Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	st: RDA		Preparati	on Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 09:43	1.015	0.0833	mg/L	0.03	0.1	J
* Calcium, Total	8/10/20 15:00	8/12/20 12:07	10.15	76.9	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 12:07	10.15	8.83	mg/L	0.203	0.5075	
* Lithium, Total	8/10/20 15:00	8/12/20 09:43	1.015	0.102	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:07	10.15	42.9	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 12:07	10.15	86.0	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	Analy	st: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:31	10.15	9.39	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	Analy	st: DLJ		Preparati	on Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:07	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:07	1.015	0.00214	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 11:07	1.015	0.0211	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:07	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:07	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:07	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:07	1.015	0.00734	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 11:07	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:07	1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/10/20 11:07	1.015	5.00	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/10/20 11:07	1.015	0.851	mg/L	0.001	0.005	
* Selenium, Total	8/7/20 12:54	8/10/20 11:07	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:07	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Analy	st: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/10/20 10:34	1.015	0.801	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	Analy	st: GAS						
* Mercury, Total by CVAA	8/11/20 09:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		st: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00		1	153	mg/L		0.1	
Analytical Method: SM 2540C		/st: TJW	•		ŭ			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:20	1	798	mg/L		50	

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

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-20

Location Code:

WMWGORG

Collected:

Customer ID: Submittal Date: 8/3/20 13:59 8/6/20 11:01

Laboratory ID Number: BA14544

Laboratory ID Number: BA14544									
Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Ana	lyst: JAG							_
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	05	1	153	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	05	1	0.03	mg/L			
Analytical Method: SM4500CI E	Ana	lyst: JCC							
* Chloride	8/10/20 12:33	8/10/20 12:3	33	1	15.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Ana	lyst: JCC							
* Fluoride	8/11/20 10:48	8/11/20 10:4	18	1	0.188	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Ana	lyst: JCC							
* Sulfate	8/7/20 11:30	8/7/20 11:30)	20	379	mg/L	10.00	20	
Analytical Method: Field Measurements	Ana	lyst: DKG							
Conductivity	8/3/20 13:55	8/3/20 13:55	5		1185.16	uS/cm			FA
рН	8/3/20 13:55	8/3/20 13:55	5		6.03	SU			FA
Temperature	8/3/20 13:55	8/3/20 13:55	5		19.53	С			FA
Turbidity	8/3/20 13:55	8/3/20 13:55	5		4.15	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 13:59

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BA14544

				MB					Standard		Rec		Prec
Sample Analysis		Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550 Thallium, To	otal	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550 Arsenic, Tot	al	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550 Boron, Tota	l	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550 Cadmium, T	otal	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14552 Iron, Dissol	ved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14550 Mercury, To	otal by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550 Magnesium	, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550 Chromium,	Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550 Manganese	, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550 Calcium, To	otal	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550 Iron, Total		mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550 Potassium,	Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550 Sodium, To	tal	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550 Antimony, T	otal	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14552 Manganese	, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14550 Cobalt, Tota	al	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550 Selenium, T	otal	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20
BA14550 Beryllium, T	otal	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550 Lithium, Tot	al	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550 Lead, Total		mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20
BA14550 Barium, Tot	al	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550 Molybdenur	n, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20

Batch QC Summary



Customer Account: WMWGORG Sample Date: 8/3/20 13:59

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BA14544

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4	80 to 120	0.988	20
BA14550	Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102	80 to 120	7.71	20
BA14550	Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5	80 to 120	1.63	20
BA14550	Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60			0.00	5
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-20 DUPLocation Code:WMWGORGCollected:8/3/20 13:59

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14545

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	yst: RDA		Preparation Method: EPA 1638				
* Boron, Total	8/10/20 15:00	8/12/20 09:4	6 1.015	0.0822	mg/L	0.03	0.1	J
* Calcium, Total	8/10/20 15:00	8/12/20 12:1	0 10.15	77.3	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 12:1	0 10.15	8.93	mg/L	0.203	0.5075	
* Lithium, Total	8/10/20 15:00	8/12/20 09:4	6 1.015	0.101	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:1	0 10.15	42.9	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 12:1	0 10.15	86.6	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	Analy	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:3	4 10.15	9.37	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	Analy	yst: DLJ		Preparat	tion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	0.00210	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	0.0200	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	0.00741	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	5.09	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	0.865	mg/L	0.001	0.005	
* Selenium, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:1	0 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Analy	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/10/20 10:3	7 1.015	0.803	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	Analy	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:1	0 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Analy	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00		5 1	156	mg/L		0.1	
Analytical Method: SM 2540C		yst: TJW			-			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	792	mg/L		50	

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

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-20 DUPLocation Code:WMWGORGCollected:8/3/20 13:59

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14545

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	156	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	0.03	mg/L			
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 12:34	8/10/20 12:3	4	1	15.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 10:50	8/11/20 10:5	60	1	0.183	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 11:31	8/7/20 11:31	:	20	393	mg/L	10.00	20	
Analytical Method: Field Measurements	Anal	yst: DKG							
Conductivity	8/3/20 13:55	8/3/20 13:55	i		1185.16	uS/cm			FA
рН	8/3/20 13:55	8/3/20 13:55	i		6.03	SU			FA
Temperature	8/3/20 13:55	8/3/20 13:55	i		19.53	С			FA
Turbidity	8/3/20 13:55	8/3/20 13:55	i		4.15	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 13:59

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-20 DUP

Laboratory ID Number: BA14545

<u> </u>				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550	Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550	Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550	Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550	Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14552	Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14550	Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550	Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20
BA14550	Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550	Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550	Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550	Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550	Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14552	Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14550	Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550	Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550	Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550	Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550	Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20
BA14550	Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550	Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 13:59

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-20 DUP

Laboratory ID Number: BA14545

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550 Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4	80 to 120	0.988	20
BA14550 Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102	80 to 120	7.71	20
BA14550 Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5	80 to 120	1.63	20
BA14550 Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60			0.00	5
BA14563 Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Certificate Of Analysis



Description: Gorgas Gypsum Field Blank-1Location Code:WMWGORGFBCollected:8/3/20 14:45

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14546

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparat	ion Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 09:4	9 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 09:4	9 1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	8/10/20 15:00	8/12/20 09:4	9 1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	8/10/20 15:00	8/12/20 09:4	9 1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	8/10/20 15:00	8/12/20 09:4	9 1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	8/10/20 15:00	8/12/20 09:4	9 1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparat	ion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:1	3 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:1	3 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	Anal	yst: JCC						
* Chloride	8/10/20 12:35	8/10/20 12:3	5 1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
* Fluoride	8/11/20 10:51		1 1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011		yst: JCC						
* Sulfate	8/7/20 11:33	, 8/7/20 11:33	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: WMWGORGFB **Sample Date:** 8/3/20 14:45

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BA14546

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550	Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550	Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550	Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550	Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14550	Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550	Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550	Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550	Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550	Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14550	Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550	Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550	Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550	Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20
BA14550	Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550	Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550	Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20
BA14550	Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550	Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20

Comments:

Batch QC Summary



Customer Account: WMWGORGFB

Sample Date: 8

8/3/20 14:45

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BA14546

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4	80 to 120	0.988	20
BA14550	Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102	80 to 120	7.71	20
BA14550	Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5	80 to 120	1.63	20
BA14550	Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60			0.00	5

Comments:

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-21Location Code:WMWGORGCollected:8/4/20 08:53

Customer ID:

Laboratory ID Number: BA14547 Submittal Date: 8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	on Method: L	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 09:5	2 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 09:5	2 1.015	36.4	mg/L	0.1	0.5	
* Iron, Total	8/10/20 15:00	8/12/20 09:5	2 1.015	3.32	mg/L	0.02	0.05	
* Lithium, Total	8/10/20 15:00	8/12/20 09:5	2 1.015	0.0182	mg/L	0.01	0.02	J
* Magnesium, Total	8/10/20 15:00	8/12/20 09:5	2 1.015	36.0	mg/L	0.1	0.5	
* Sodium, Total	8/10/20 15:00	8/12/20 12:1	3 10.15	86.3	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 11:0	0 1.015	3.31	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	on Method: I	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	0.00204	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	0.120	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	8/7/20 12:54	8/10/20 11:1	5 1.015	0.00347	mg/L	0.002	0.01	J
* Potassium, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	2.69	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:0	0 5.075	2.10	mg/L	0.005075	0.025375	
* Selenium, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:1	5 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:2	3 5.075	2.12	mg/L	0.005075	0.025375	
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA		8/11/20 13:1	5 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00	8/14/20 11:0	5 1	410	mg/L		0.1	
Analytical Method: SM 2540C		lyst: TJW						
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	447	mg/L		25	

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

Laboratory ID Number: BA14547

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-21

Location Code: Collected:

WMWGORG 8/4/20 08:53

Customer ID:

Submittal Date:

8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anai	lyst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	410	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	0.41	mg/L			
Analytical Method: SM4500Cl E	Anai	lyst: JCC							
* Chloride	8/10/20 12:36	8/10/20 12:3	6	1	13.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anai	lyst: JCC							
* Fluoride	8/11/20 10:52	8/11/20 10:5	2	1	0.323	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anai	yst: JCC							
* Sulfate	8/7/20 11:34	8/7/20 11:34	ļ	1	23.8	mg/L	0.50	1	
Analytical Method: Field Measurements	Anai	lyst: DKG							
Conductivity	8/4/20 08:49	8/4/20 08:49)		762.82	uS/cm			FA
рН	8/4/20 08:49	8/4/20 08:49)		6.94	SU			FA
Temperature	8/4/20 08:49	8/4/20 08:49)		19.38	С			FA
Turbidity	8/4/20 08:49	8/4/20 08:49)		1.86	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 08:53

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BA14547

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550	Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550	Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20
BA14550	Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550	Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14552	Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14550	Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550	Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20
BA14550	Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550	Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550	Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550	Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550	Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14552	Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14550	Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550	Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550	Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550	Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550	Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550	Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550	Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date: 8/4/20 08:53

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BA14547

			MB			Sample		Standard	Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec Limit	Prec	<u>Li</u> mit
BA14550 Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4 80 to 120	0.988	20
BA14550 Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102 80 to 120	7.71	20
BA14550 Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5 80 to 120	1.63	20
BA14550 Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60		0.00	5
BA14563 Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0		2.72	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 8/19/2020

> Reported: 8/21/2020 Version: 3.1 COA_CCR

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-22Location Code:WMWGORGCollected:8/4/20 10:00

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14548

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	yst: RDA		Prepa	ration Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 09:5	5 1.01	0.108	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 12:1	6 20.3	70.4	mg/L	2.03	10.15	
* Iron, Total	8/10/20 15:00	8/12/20 12:1	6 20.3	55.0	mg/L	0.406	1.015	
* Lithium, Total	8/10/20 15:00	8/12/20 09:5	5 1.01	0.0558	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 09:5	5 1.01	36.7	mg/L	0.1	0.5	
* Sodium, Total	8/10/20 15:00	8/12/20 09:5	5 1.01	36.1	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:3	7 101.	5 53.6	mg/L	2.03	5.075	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Prepa	ration Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	Not Detect	ed mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	0.0297	mg/L	0.001	0.005	
* Barium, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	0.0243	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	Not Detect	ed mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	Not Detect	ed mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	Not Detect	ed mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	0.00210	mg/L	0.002	0.005	J
* Lead, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	Not Detect	ed mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	0.00267	mg/L	0.002	0.01	J
* Potassium, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	7.18	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:0	3 5.07	5 2.27	mg/L	0.005075	0.025375	
* Selenium, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	Not Detect	ed mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:1	8 1.01	Not Detect	ed mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:2	5 5.07	5 2.39	mg/L	0.005075	0.025375	
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20		8 1	Not Detect	ed mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG			-			
Alkalinity, Total as CaCO3	8/14/20 10:00		5 1	89.8	mg/L		0.1	
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	638	mg/L		50	

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

Certificate Of Analysis



Location Code: WMWGORG Description: Gorgas Gypsum - PZ-22 Collected:

Customer ID:

8/4/20 10:00

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14548				Subi	ilillai Dale.	0/0/20 11.0	<i>)</i>	
Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Ana	lyst: JAG						
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5 1	89.8	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5 1	0.02	mg/L			
Analytical Method: SM4500Cl E	Ana	lyst: JCC						
* Chloride	8/10/20 12:37	8/10/20 12:3	37 1	7.77	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Ana	lyst: JCC						
* Fluoride	8/11/20 10:53	8/11/20 10:5	3 1	0.167	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Ana	lyst: JCC						
* Sulfate	8/7/20 11:35	8/7/20 11:35	5 20	340	mg/L	10.00	20	
Analytical Method: Field Measurements	Ana	lyst: DKG						
Conductivity	8/4/20 09:57	8/4/20 09:57	•	863.41	uS/cm			FA
рН	8/4/20 09:57	8/4/20 09:57	•	6.42	SU			FA
Temperature	8/4/20 09:57	8/4/20 09:57	•	18.94	С			FA
Turbidity	8/4/20 09:57	8/4/20 09:57	•	1.3	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 10:00

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BA14548

-			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550 Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550 Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550 Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14552 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14550 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20
BA14550 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20
BA14550 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20
BA14550 Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550 Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550 Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550 Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14552 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20

Batch QC Summary



Customer Account: WMWGORG Sample Date: 8/4/20 10:00

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BA14548

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4	80 to 120	0.988	20
BA14550	Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102	80 to 120	7.71	20
BA14550	Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5	80 to 120	1.63	20
BA14550	Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60			0.00	5
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 8/19/2020

> Reported: 8/21/2020 Version: 3.1 COA_CCR

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-17Location Code:WMWGORGCollected:8/4/20 11:20

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14549

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	yst: RDA		Preparati	on Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 09:5	7 1.015	0.168	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 12:1	9 101.5	218	mg/L	10.15	50.75	
* Iron, Total	8/10/20 15:00	8/12/20 12:1	9 101.5	57.3	mg/L	2.03	5.075	
* Lithium, Total	8/10/20 15:00	8/12/20 09:5	7 1.015	1.39	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:1	9 101.5	150	mg/L	10.15	50.75	
* Sodium, Total	8/10/20 15:00	8/12/20 09:5	7 1.015	18.9	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Analy	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:4	0 101.5	47.9	mg/L	2.03	5.075	
Analytical Method: EPA 200.8	Analy	yst: DLJ		Preparati	on Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.00495	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.0181	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.0145	mg/L	0.0006	0.003	
* Cadmium, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.00197	mg/L	0.0003	0.001	
* Chromium, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.00254	mg/L	0.002	0.01	J
* Cobalt, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.471	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.00582	mg/L	0.001	0.005	
 Molybdenum, Total 	8/7/20 12:54	8/10/20 11:2	0 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	6.77	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:0	5 10.15	12.4	mg/L	0.01015	0.05075	
* Selenium, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.0135	mg/L	0.002	0.01	
* Thallium, Total	8/7/20 12:54	8/10/20 11:2	0 1.015	0.000242	mg/L	0.0002	0.001	J
Analytical Method: EPA 200.8	Analy	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:2	8 10.15	12.6	mg/L	0.01015	0.05075	
Analytical Method: EPA 245.1	Analy	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:2	0 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Analy	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00	8/14/20 11:0	5 1	NA	mg/L		0.10	
Analytical Method: SM 2540C	Analy	yst: TJW						
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	2160	mg/L		100	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. NA result for Alkalinity is due to the initial sample pH reading below the alkalinity titration point of 4.5. LBM 08/19/2020

Certificate Of Analysis



Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BA14549

Location Code:

WMWGORG

Collected:

Customer ID:

8/4/20 11:20

Submittal Date: 8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anai	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	NA	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	NA	mg/L			
Analytical Method: SM4500Cl E	Anai	lyst: JCC							
* Chloride	8/10/20 12:39	8/10/20 12:3	39	1	1.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anai	lyst: JCC							
* Fluoride	8/11/20 10:54	8/11/20 10:5	54	1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	Anai	lyst: JCC							
* Sulfate	8/7/20 11:36	8/7/20 11:36	6	50	1310	mg/L	25.00	50	
Analytical Method: Field Measurements	Anal	lyst: DKG							
Conductivity	8/4/20 11:17	8/4/20 11:17	,		1883.10	uS/cm			FA
рН	8/4/20 11:17	8/4/20 11:17	7		4.08	SU			FA
Temperature	8/4/20 11:17	8/4/20 11:17	,		23.57	С			FA
Turbidity	8/4/20 11:17	8/4/20 11:17	7		5.56	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. NA result for Alkalinity is due to the initial sample pH reading below the alkalinity titration point of 4.5. LBM 08/19/2020

Batch QC Summary



Customer Account: WMWGORG Sample Date: 8/4/20 11:20

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BA14549

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550	Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550	Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550	Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550	Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20
BA14550	Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550	Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550	Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550	Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550	Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550	Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550	Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14552	Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14550	Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550	Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20
BA14550	Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550	Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550	Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20
BA14550	Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550	Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14552	Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. NA result for Alkalinity is due to the initial sample pH reading below the alkalinity titration point of 4.5. LBM 08/19/2020

Batch QC Summary



Customer Account: WMWGORG Sample Date: 8/4/20 11:20

8/6/20 11:01

Delivery Date:

Customer ID:

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BA14549

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4	80 to 120	0.988	20
BA14550	Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102	80 to 120	7.71	20
BA14550	Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5	80 to 120	1.63	20
BA14550	Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60			0.00	5
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. NA result for Alkalinity is due to the initial sample pH reading below the alkalinity titration point of 4.5. LBM 08/19/2020

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3VLocation Code:WMWGORGCollected:8/4/20 13:01

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14550

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:0	0 1.015	2.80	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 12:2	2 101.5	443	mg/L	10.15	50.75	R.A
* Iron, Total	8/10/20 15:00	8/12/20 12:2	2 101.5	34.3	mg/L	2.03	5.075	R.A
* Lithium, Total	8/10/20 15:00	8/12/20 10:0	0 1.015	0.395	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:2	2 101.5	243	mg/L	10.15	50.75	R.A
* Sodium, Total	8/10/20 15:00	8/12/20 12:2	2 101.5	215	mg/L	10.15	50.75	R/
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:4	2 101.5	32.2	mg/L	2.03	5.075	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	0.0170	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	0.0133	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	11.8	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:0	8 92.365	14.9	mg/L	0.092365	0.461825	R/
* Selenium, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:2	3 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:3	1 92.365	15.4	mg/L	0.092365	0.461825	
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20		2 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00	•	5 1	214	mg/L		0.1	
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	3530	mg/L		250	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3VLocation Code:WMWGORGCollected:8/4/20 13:01

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14550

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	214	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	0.03	mg/L			
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 12:40	8/10/20 12:4	0	25	305	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 10:56	8/11/20 10:5	66	1	0.349	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 11:37	8/7/20 11:37	•	100	1860	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	yst: DKG							
Conductivity	8/4/20 12:58	8/4/20 12:58	3		3805.18	uS/cm			FA
рН	8/4/20 12:58	8/4/20 12:58	3		5.90	SU			FA
Temperature	8/4/20 12:58	8/4/20 12:58	3		25.20	С			FA
Turbidity	8/4/20 12:58	8/4/20 12:58	3		1.01	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 13:01

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BA14550

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.105	0.111	0.0999	0.085 to 0.115	105	70 to 130	5.56	20
BA14550	Barium, Total	mg/L	0.00000766	0.0002	0.10	0.113	0.121	0.0897	0.085 to 0.115	96.0	70 to 130	6.84	20
BA14550	Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.104	0.110	0.0966	0.085 to 0.115	104	70 to 130	5.61	20
BA14550	Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.106	0.112	0.104	0.085 to 0.115	106	70 to 130	5.50	20
BA14550	Manganese, Total	mg/L	0.0000036	0.0001474	0.10	15.0	12.6	0.0985	0.085 to 0.115	100	70 to 130	17.4	20
BA14550	Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.110	0.119	0.105	0.085 to 0.115	110	70 to 130	7.86	20
BA14550	Boron, Total	mg/L	0.000558	0.0650254	1.00	3.78	3.76	0.964	0.85 to 1.15	98.0	70 to 130	0.531	20
BA14550	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0982	0.104	0.0962	0.085 to 0.115	98.2	70 to 130	5.74	20
BA14552	Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14550	Mercury, Total by CVAA	mg/L	0.0000256	0.0005	0.004	0.00332	0.00316	0.00364	0.0034 to 0.0046	83.0	70 to 130	4.94	20
BA14550	Magnesium, Total	mg/L	0.000661	0.0462	5.00	247	241	5.13	4.25 to 5.75	80.0	70 to 130	2.46	20
BA14550	Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.118	0.124	0.104	0.085 to 0.115	105	70 to 130	4.96	20
BA14550	Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.103	0.111	0.100	0.085 to 0.115	103	70 to 130	7.48	20
BA14550	Calcium, Total	mg/L	-0.00321	0.1518	5.00	447	438	5.03	4.25 to 5.75	80.0	70 to 130	2.03	20
BA14550	Iron, Total	mg/L	0.00220	0.0176	0.2	34.8	34.0	0.202	0.17 to 0.23	250	70 to 130	2.33	20
BA14550	Potassium, Total	mg/L	-0.00825	0.3674	10.0	23.0	23.9	10.8	8.5 to 11.5	112	70 to 130	3.84	20
BA14550	Sodium, Total	mg/L	0.000367	0.044	5.00	219	215	4.84	4.25 to 5.75	80.0	70 to 130	1.84	20
BA14550	Antimony, Total	mg/L	0.000196	0.001	0.10	0.0928	0.0984	0.0872	0.085 to 0.115	92.8	70 to 130	5.86	20
BA14552	Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14550	Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.0910	0.0921	0.0878	0.085 to 0.115	91.0	70 to 130	1.20	20
BA14550	Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.643	0.642	0.190	0.17 to 0.23	124	70 to 130	0.156	20
BA14550	Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.110	0.117	0.106	0.085 to 0.115	110	70 to 130	6.17	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date:

8/4/20 13:01

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BA14550

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14550	Chloride	mg/L	0.0146	0.50	250	546	302	10.2	9 to 11	96.4	80 to 120	0.988	20
BA14550	Fluoride	mg/L	0.0233	0.05	2.50	2.91	0.377	2.45	2.25 to 2.75	102	80 to 120	7.71	20
BA14550	Sulfate	mg/L	-0.397	0.50	2000	3770	1830	18.9	18 to 22	95.5	80 to 120	1.63	20
BA14550	Solids, Dissolved	mg/L	0.0000	25			3530	52.0	40 to 60			0.00	5
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3Location Code:WMWGORGCollected:8/4/20 15:35

Customer ID:

Submittal Date: 8/6/20 11:01

· · · · · · · · · · · · · · · · · · ·	Analyzed yst: RDA 8/12/20 10:	Vio Spec	DF	Results	Units	MDL	RL	Q
8/10/20 15:00 8/10/20 15:00								
8/10/20 15:00	8/12/20 10:			Preparati	on Method: E	PA 1638		
		15	1.015	1.82	mg/L	0.03	0.1	
8/10/20 15:00	8/12/20 12:3	37	101.5	545	mg/L	10.15	50.75	
	8/12/20 12:3	37	101.5	267	mg/L	2.03	5.075	
8/10/20 15:00	8/12/20 10:	15	1.015	0.468	mg/L	0.01	0.02	
8/10/20 15:00	8/12/20 12:3	37	101.5	322	mg/L	10.15	50.75	
8/10/20 15:00	8/12/20 12:3	37	101.5	222	mg/L	10.15	50.75	
Anal	yst: RDA							
8/10/20 13:30	8/11/20 13:4	1 5	101.5	261	mg/L	2.03	5.075	
Anal	yst: DLJ			Preparati	on Method: E	PA 1638		
8/7/20 12:54	8/10/20 11:3	39	1.015	Not Detected	mg/L	0.0008	0.003	U
8/7/20 12:54	8/10/20 11:3	39	1.015	Not Detected	mg/L	0.001	0.005	U
8/7/20 12:54	8/10/20 11:3	39	1.015	0.0139	mg/L	0.002	0.01	
8/7/20 12:54	8/10/20 11:3	39	1.015	0.00174	mg/L	0.0006	0.003	J
8/7/20 12:54	8/10/20 11:3	39	1.015	Not Detected	mg/L	0.0003	0.001	U
8/7/20 12:54	8/10/20 11:3	39	1.015	Not Detected	mg/L	0.002	0.01	U
8/7/20 12:54	8/10/20 11:3	39	1.015	0.0862	mg/L	0.002	0.005	
8/7/20 12:54	8/10/20 11:3	39	1.015	Not Detected	mg/L	0.001	0.005	U
8/7/20 12:54	8/10/20 11:3	39	1.015	Not Detected	mg/L	0.002	0.01	U
8/7/20 12:54	8/11/20 12:	15	1.015	12.5	mg/L	0.3	2.5	
8/7/20 12:54	8/11/20 14:	16	92.365	30.4	mg/L	0.092365	0.461825	
8/7/20 12:54	8/10/20 11:3	39	1.015	Not Detected	mg/L	0.002	0.01	U
8/7/20 12:54	8/10/20 11:3	39	1.015	Not Detected	mg/L	0.0002	0.001	U
Anal	yst: DLJ							
8/7/20 14:00	8/11/20 15:3	33	92.365	34.2	mg/L	0.092365	0.461825	
Anal	yst: GAS							
8/11/20 09:20	8/11/20 13:4	10	1	Not Detected	mg/L	0.0003	0.0005	U
Anal	yst: JAG							
8/14/20 10:00	8/14/20 11:0)5	1	114	mg/L		0.1	
Anal <u>.</u>	yst: TJW							
8/7/20 14:25	8/11/20 12:2	20	1	5110	mg/L		250	
	8/10/20 15:00 8/10/20 15:00 Anal, 8/10/20 13:30 Anal, 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 8/7/20 12:54 Anal, 8/11/20 09:20 Anal, 8/14/20 10:00	8/10/20 15:00 8/12/20 12:3 8/10/20 15:00 8/12/20 12:3 Analyst: RDA 8/10/20 13:30 8/11/20 13:4 Analyst: DLJ 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 8/7/20 12:54 8/10/20 11:3 Analyst: DLJ 8/7/20 14:00 8/11/20 13:4 Analyst: JAG 8/14/20 10:00 8/14/20 11:0 Analyst: TJW	8/10/20 15:00 8/12/20 12:37 8/10/20 15:00 8/12/20 12:37 Analyst: RDA 8/10/20 13:30 8/11/20 13:45 Analyst: DLJ 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/11/20 12:15 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 8/7/20 12:54 8/10/20 11:39 Analyst: DLJ 8/7/20 14:00 8/11/20 15:33 Analyst: GAS 8/11/20 09:20 8/11/20 13:40 Analyst: JAG 8/14/20 10:00 8/14/20 11:05 Analyst: TJW	8/10/20 15:00 8/12/20 12:37 101.5 8/10/20 15:00 8/12/20 12:37 101.5 Analyst: RDA 8/10/20 13:30 8/11/20 13:45 101.5 Analyst: DLJ 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 8/7/20 12:54 8/10/20 11:39 1.015 Analyst: DLJ 8/7/20 14:00 8/11/20 15:33 92.365 Analyst: GAS 8/11/20 09:20 8/11/20 13:40 1 Analyst: JAG 8/14/20 10:00 8/14/20 11:05 1	8/10/20 15:00 8/12/20 12:37 101.5 322 Analyst: RDA 8/10/20 13:30 8/11/20 13:45 101.5 261 Analyst: DLJ Preparati 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected 8/7/20 12:54 8/10/20 11:39 1.015 0.0139 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected 8/7/20 12:54 8/11/20 12:15 1.015 12.5 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected Analyst: DLJ 8/7/20 14:00 8/11/20 15:33 92.365 34.2 Analyst: GAS 8/11/20 09:20 8/11/20 13:40 1 Not Detected Analyst: JAG 8/14/20 10:00 8/14/20 11:05 1 Not Detected	8/10/20 15:00 8/12/20 12:37 101.5 322 mg/L 8/10/20 15:00 8/12/20 12:37 101.5 222 mg/L Analyst: RDA 8/10/20 13:30 8/11/20 13:45 101.5 261 mg/L Analyst: DLJ Preparation Method: El 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 8/7/20 12:54 8/11/20 12:15 1.015 12.5 mg/L 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L Analyst: DLJ 8/7/20 14:00 8/11/20 15:33 92.365 34.2 mg/L Analyst: JAG 8/11/20 09:20 8/11/20 13:40 1 Not Detected mg/L Analyst: TJW	8/10/20 15:00 8/12/20 12:37 101.5 322 mg/L 10.15 8/10/20 15:00 8/12/20 12:37 101.5 222 mg/L 10.15 Analyst: RDA 8/10/20 13:30 8/11/20 13:45 101.5 261 mg/L 2.03 Analyst: DLJ Analyst: DLJ 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0008 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0006 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0006 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0006 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0003 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0002 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0002 8/7/20 10:00 8/11/20 15:33 92:365 34.2 mg/L 0.0003	8/10/20 15:00 8/12/20 12:37 101.5 322 mg/L 10.15 50.75 8/10/20 15:00 8/12/20 12:37 101.5 222 mg/L 10.15 50.75 Analyst: RDA 8/10/20 13:30 8/11/20 13:45 101.5 261 mg/L 2.03 5.075 Analyst: DLJ Preparation Method: EPA 1638 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0008 0.003 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.001 0.005 8/7/20 12:54 8/10/20 11:39 1.015 0.0139 mg/L 0.002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0006 0.003 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0006 0.003 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0000 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.005 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.005 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.005 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/11/20 12:15 1.015 12.5 mg/L 0.3 2.5 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.002 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0002 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0002 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0002 0.001 8/7/20 12:54 8/10/20 11:39 1.015 Not Detected mg/L 0.0003 0.0005

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3

Location Code:

WMWGORG 8/4/20 15:35

Collected: Customer ID:

Submittal Date:

8/6/20 11:01

Laboratory ID Number: BA14551				Subn	nittai Date:	8/6/20 11:0	1	
Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	lyst: JAG						
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5 1	114	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5 1	0.01	mg/L			
Analytical Method: SM4500CI E	Anal	lyst: JCC						
* Chloride	8/10/20 13:08	8/10/20 13:0	8 25	222	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	Anal	lyst: JCC						
* Fluoride	8/11/20 12:10	8/11/20 12:1	0 1	0.389	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	lyst: JCC						
* Sulfate	8/7/20 12:36	8/7/20 12:36	200	2820	mg/L	100.00	200	
Analytical Method: Field Measurements	Anal	lyst: DKG						
Conductivity	8/4/20 15:31	8/4/20 15:31		4345.17	uS/cm			FA
рН	8/4/20 15:31	8/4/20 15:31		6.09	SU			FA
Temperature	8/4/20 15:31	8/4/20 15:31		21.30	С			FA
Turbidity	8/4/20 15:31	8/4/20 15:31		8.88	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 15:35

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BA14551

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14560	Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
BA14552	Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14560	Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
BA14560	Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
BA14560	Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
BA14560	Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560	Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20
BA14560	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560	Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14560	Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560	Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
BA14560	Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560	Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
BA14560	Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14552	Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14560	Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560	Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
BA14560	Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560	Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560	Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560	Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560	Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 15:35

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BA14551

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14565	Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14560	Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	30 to 120	6.61	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14560	Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	30 to 120	1.30	20
BA14560	Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	30 to 120	0.855	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-8VLocation Code:WMWGORGCollected:8/5/20 10:20

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14552

Name	Prepared	Analyzed ∖	io Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	st: RDA		Preparati	on Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:18	1.015	0.131	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 10:18	1.015	31.9	mg/L	0.1	0.5	
* Iron, Total	8/10/20 15:00	8/12/20 10:18	1.015	0.0669	mg/L	0.02	0.05	
* Lithium, Total	8/10/20 15:00	8/12/20 10:18	1.015	0.275	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 10:18	1.015	14.8	mg/L	0.1	0.5	
* Sodium, Total	8/10/20 15:00	8/12/20 12:40	10.15	369	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	Analy	st: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 11:15	1.015	0.0404	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	Analy	st: DLJ		Preparati	on Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:41	1.015	0.00476	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 11:41	1.015	0.125	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:17	1.015	3.91	mg/L	0.3	2.5	
 Manganese, Total 	8/7/20 12:54	8/10/20 11:41	1.015	0.100	mg/L	0.001	0.005	
* Selenium, Total	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:41	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Analy	st: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/10/20 10:52	1.015	0.0915	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	Analy	st: GAS						
* Mercury, Total by CVAA	•	8/11/20 13:42	1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		st: JAG						
Alkalinity, Total as CaCO3	-	8/14/20 11:05	1	744	mg/L		0.1	
Analytical Method: SM 2540C	Analy	/st: TJW						
* Solids, Dissolved	-	8/14/20 09:50	1	1100	mg/L		100	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-8VLocation Code:WMWGORGCollected:8/5/20 10:20

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	741	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	3.41	mg/L			
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 13:10	8/10/20 13:1	0	1	13.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 12:11	8/11/20 12:1	1	1	0.256	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 12:37	8/7/20 12:37	•	40	243	mg/L	20.00	40	
Analytical Method: Field Measurements	Anal	yst: DKG							
Conductivity	8/5/20 10:16	8/5/20 10:16	i		1635.82	uS/cm			FA
рН	8/5/20 10:16	8/5/20 10:16	i		7.58	SU			FA
Temperature	8/5/20 10:16	8/5/20 10:16	i		22.32	С			FA
Turbidity	8/5/20 10:16	8/5/20 10:16	i		1.62	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 10:20

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BA14552

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14560 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
BA14552 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	0.241	0.245	0.206	0.17 to 0.23	100	70 to 130	1.65	20
BA14560 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
BA14560 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
BA14560 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14560 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560 Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14552 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	0.183	0.190	0.103	0.085 to 0.115	91.5	70 to 130	3.75	20
BA14560 Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
BA14560 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
BA14560 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
BA14560 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560 Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
BA14560 Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560 Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
BA14560 Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560 Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20

Batch QC Summary



Customer Account: WMWGORG Sample Date:

8/5/20 10:20

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BA14552

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	Limit
BA14552	Solids, Dissolved	mg/L	2.00	25			1110	53.0	40 to 60			0.452	5
BA14560	Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	80 to 120	1.30	20
BA14560	Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	80 to 120	0.855	20
BA14560	Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	80 to 120	6.61	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Certificate Of Analysis



Description: Gorgas Gypsum - MW-8Location Code:WMWGORGCollected:8/5/20 11:24

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14553

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparat	tion Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:2	1 1.015	2.16	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 12:4	3 20.3	497	mg/L	2.03	10.15	
* Iron, Total	8/10/20 15:00	8/12/20 12:4	3 20.3	9.79	mg/L	0.406	1.015	
* Lithium, Total	8/10/20 15:00	8/12/20 10:2	1 1.015	0.206	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:4	3 20.3	326	mg/L	2.03	10.15	
* Sodium, Total	8/10/20 15:00	8/12/20 12:4	3 20.3	169	mg/L	2.03	10.15	
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:4	8 10.15	9.32	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparat	tion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	0.0216	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:2	0 1.015	8.96	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:1	9 92.365	12.4	mg/L	0.092365	0.461825	
* Selenium, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:4	4 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:3	6 92.365	16.2	mg/L	0.092365	0.461825	
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:4	4 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00		5 1	531	mg/L		0.1	
Analytical Method: SM 2540C		yst: TJW			-			
* Solids, Dissolved	8/10/20 12:25		0 1	3610	mg/L		250	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-8

Location Code: Collected:

WMWGORG 8/5/20 11:24

Customer ID:

Submittal Date:

8/6/20 11:01

Laboratory ID Number: BA14553				Subr	nittai Date:	8/6/20 11:0)1	
Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	lyst: JAG						
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5 1	530	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5 1	0.40	mg/L			
Analytical Method: SM4500CI E	Anal	lyst: JCC						
* Chloride	8/10/20 13:11	8/10/20 13:1	1 25	146	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	Anal	lyst: JCC						
* Fluoride	8/11/20 12:12	8/11/20 12:1	2 1	0.119	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	lyst: JCC						
* Sulfate	8/7/20 12:39	8/7/20 12:39	100	1880	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	lyst: DKG						
Conductivity	8/5/20 11:21	8/5/20 11:21		3686.49	uS/cm			FA
рН	8/5/20 11:21	8/5/20 11:21		6.76	SU			FA
Temperature	8/5/20 11:21	8/5/20 11:21		22.37	С			FA
Turbidity	8/5/20 11:21	8/5/20 11:21		3.86	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 11:24

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BA14553

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14560 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
BA14560 Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
BA14560 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
BA14560 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
BA14560 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560 Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20
BA14560 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
BA14560 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560 Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14560 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560 Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
BA14563 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20
BA14560 Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560 Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
BA14560 Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
BA14560 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14563 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20

Batch QC Summary



Customer Account: WMWGORG Sample Date: 8/5/20 11:24

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BA14553

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14566 Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14560 Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7	80 to 120	1.30	20
BA14560 Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0	80 to 120	0.855	20
BA14560 Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3	80 to 120	6.61	20
BA14563 Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Certificate Of Analysis



Description: Gorgas Gypsum - MW-12HLocation Code:WMWGORGCollected:8/5/20 12:50

Customer ID:

Laboratory ID Number: BA14554 Submittal Date: 8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Prepa	aration Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:2	4 1.015	0.0748	mg/L	0.03	0.1	J
* Calcium, Total	8/10/20 15:00	8/12/20 12:4	5 10.15	126	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 10:2	4 1.015	2.10	mg/L	0.02	0.05	
* Lithium, Total	8/10/20 15:00	8/12/20 10:2	4 1.015	0.441	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:4	5 10.15	124	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 10:2	4 1.015	26.1	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 11:3	3 1.015	1.96	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Prepa	aration Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	Not Detec	ted mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	0.00158	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	0.0160	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	0.00747	mg/L	0.0006	0.003	
* Cadmium, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	0.00393	mg/L	0.0003	0.001	
* Chromium, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	Not Detec	ted mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	0.436	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	0.00329	mg/L	0.001	0.005	J
 Molybdenum, Total 	8/7/20 12:54	8/10/20 11:4	6 1.015	Not Detec	ted mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:2	2 1.015	5.53	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:2	1 92.36	55 18.6	mg/L	0.092365	0.461825	
* Selenium, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	0.00417	mg/L	0.002	0.01	J
* Thallium, Total	8/7/20 12:54	8/10/20 11:4	6 1.015	0.000297	mg/L	0.0002	0.001	J
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:3	92.36	55 20.1	mg/L	0.092365	0.461825	
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20		7 1	Not Detec	ted mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00	8/14/20 11:0	5 1	NA	mg/L		0.10	
Analytical Method: SM 2540C	Anal	yst: TJW						
* Solids, Dissolved	8/10/20 12:25	-	60 1	1380	mg/L		83.3	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. NA result for Alkalinity is due to the initial sample pH reading below the alkalinity titration point of 4.5. LBM 08/19/2020

Certificate Of Analysis



Description: Gorgas Gypsum - MW-12HLocation Code:WMWGORGCollected:8/5/20 12:50

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anai	lyst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	NA	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	NA	mg/L			
Analytical Method: SM4500Cl E	Anai	lyst: JCC							
* Chloride	8/10/20 13:12	8/10/20 13:1	2	1	2.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	lyst: JCC							
* Fluoride	8/11/20 12:14	8/11/20 12:1	4	1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	Anai	lyst: JCC							
* Sulfate	8/7/20 12:40	8/7/20 12:40)	40	811	mg/L	20.00	40	
Analytical Method: Field Measurements	Anai	lyst: DKG							
Conductivity	8/5/20 12:46	8/5/20 12:46	i		1325.81	uS/cm			FA
рН	8/5/20 12:46	8/5/20 12:46	i		4.13	SU			FA
Temperature	8/5/20 12:46	8/5/20 12:46	i		20.32	С			FA
Turbidity	8/5/20 12:46	8/5/20 12:46	i		7.94	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. NA result for Alkalinity is due to the initial sample pH reading below the alkalinity titration point of 4.5. LBM 08/19/2020

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 12:50

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BA14554

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14560 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560 Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20
BA14560 Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
BA14560 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
BA14560 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
BA14560 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560 Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14560 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
BA14560 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14563 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20
BA14560 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
BA14560 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560 Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560 Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
BA14560 Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560 Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
BA14563 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20
BA14560 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. NA result for Alkalinity is due to the initial sample pH reading below the alkalinity titration point of 4.5. LBM 08/19/2020

Batch QC Summary



Customer Account: WMWGORG

Sample Date:

8/5/20 12:50

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BA14554

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14566	Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14560	Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	30 to 120	6.61	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14560	Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	30 to 120	1.30	20
BA14560	Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	30 to 120	0.855	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. NA result for Alkalinity is due to the initial sample pH reading below the alkalinity titration point of 4.5. LBM 08/19/2020

Certificate Of Analysis



Description: Gorgas Gypsum - MW-12VLocation Code:WMWGORGCollected:8/5/20 13:47

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14555

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Prepara	tion Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:2	7 1.015	1.55	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 12:4	8 101.5	350	mg/L	10.15	50.75	
* Iron, Total	8/10/20 15:00	8/12/20 12:4	8 101.5	37.3	mg/L	2.03	5.075	
* Lithium, Total	8/10/20 15:00	8/12/20 10:2	7 1.015	0.334	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:4	8 101.5	220	mg/L	10.15	50.75	
* Sodium, Total	8/10/20 15:00	8/12/20 12:4	8 101.5	288	mg/L	10.15	50.75	
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:5	1 101.5	38.2	mg/L	2.03	5.075	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Prepara	tion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	0.0157	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	8/7/20 12:54	8/10/20 11:4	9 1.015	0.00247	mg/L	0.002	0.01	J
* Potassium, Total	8/7/20 12:54	8/11/20 12:2	5 1.015	8.49	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:2	4 92.365	25.1	mg/L	0.092365	0.461825	
* Selenium, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:4	9 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:4	1 92.365	27.3	mg/L	0.092365	0.461825	
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:4	9 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00		5 1	276	mg/L		0.1	
Analytical Method: SM 2540C		yst: TJW			-			
* Solids, Dissolved	8/10/20 12:25		0 1	3330	mg/L		250	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-12V

Location Code:

Submittal Date:

WMWGORG

Collected:

Customer ID:

8/5/20 13:47

8/6/20 11:01

Laboratory ID Number: BA14555

Laboratory ID Number: BA14555									
Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Ana	lyst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	05	1	275	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	05	1	0.06	mg/L			
Analytical Method: SM4500CI E	Ana	lyst: JCC							
* Chloride	8/10/20 13:13	8/10/20 13:	13	25	159	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	Ana	lyst: JCC							
* Fluoride	8/11/20 12:15	8/11/20 12:	15	1	0.217	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Ana	lyst: JCC							
* Sulfate	8/7/20 12:41	8/7/20 12:4	1	100	1830	mg/L	50.00	100	
Analytical Method: Field Measurements	Ana	lyst: DKG							
Conductivity	8/5/20 13:43	8/5/20 13:43	3		3604.38	uS/cm			FA
рН	8/5/20 13:43	8/5/20 13:43	3		6.15	SU			FA
Temperature	8/5/20 13:43	8/5/20 13:43	3		20.10	С			FA
Turbidity	8/5/20 13:43	8/5/20 13:43	3		6.84	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 13:47

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BA14555

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
3A14560 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
3A14560 Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
3A14560 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
3A14560 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
3A14560 Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560 Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
3A14560 Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
3A14560 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
3A14560 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14563 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20
BA14560 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
3A14560 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560 Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
BA14563 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20
3A14560 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560 Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
3A14560 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
3A14560 Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20

Batch QC Summary



Customer Account: WMWGORG

Customer ID:

Sample Date: 8/5/20 13:47

Dallarana Data

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BA14555

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14566 Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14560 Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	30 to 120	6.61	20
BA14563 Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14560 Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	30 to 120	1.30	20
BA14560 Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	30 to 120	0.855	20

Certificate Of Analysis



Description: Gorgas Gypsum Field Blank-3Location Code:WMWGORGFBCollected:8/5/20 14:10

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14556

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	yst: RDA		Preparati	ion Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:3	0 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 10:3	0 1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	8/10/20 15:00	8/12/20 10:3	1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	8/10/20 15:00	8/12/20 10:3	1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	8/10/20 15:00	8/12/20 10:3	1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	8/10/20 15:00	8/12/20 10:3	1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	Analy	yst: DLJ		Preparati	ion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:2	1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	8/7/20 12:54	8/10/20 11:5	2 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 11:5	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Analy	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:5	1 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Analy	yst: TJW						
* Solids, Dissolved	8/10/20 12:25	8/14/20 09:5	0 1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	Analy	yst: JCC						
* Chloride	8/10/20 13:14	8/10/20 13:1	4 1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	Analy	yst: JCC						
* Fluoride	8/11/20 12:16		6 1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011		yst: JCC						
* Sulfate	8/7/20 12:42	, 8/7/20 12:42	! 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: WMWGORGFB **Sample Date:** 8/5/20 14:10

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum Field Blank-3

Laboratory ID Number: BA14556

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14560	Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
BA14560	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560	Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14560	Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560	Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
BA14560	Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560	Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560	Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
BA14560	Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560	Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560	Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560	Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560	Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
BA14560	Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
BA14560	Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
BA14560	Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
BA14560	Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
BA14560	Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14560	Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560	Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20

Comments:

Batch QC Summary



Customer Account: WMWGORGFB

Sample Date:

8/5/20 14:10

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum Field Blank-3

Laboratory ID Number: BA14556

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14566	Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14560	Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	0 to 120	6.61	20
BA14560	Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	0 to 120	1.30	20
BA14560	Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	0 to 120	0.855	20

Comments:

Certificate Of Analysis



Description: Gorgas Gypsum - MW-1LLocation Code:WMWGORGCollected:8/3/20 11:45

Customer ID:

Submittal Date: 8/6/20 11:01

Labor	atory	ID	Num	ber:	BA14557

Name	Prepared	Analyzed	Vio Spe	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anai	lyst: RDA			Preparati	on Method: El	PA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:	:33	1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 12:	:51	10.15	148	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 10:	:33	1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	8/10/20 15:00	8/12/20 10:	:33	1.015	0.0259	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:	:51	10.15	281	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 10:	:33	1.015	38.3	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Anai	lyst: RDA							
* Iron, Dissolved	8/10/20 13:30	8/11/20 11:	:39	1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	Anai	lyst: DLJ			Preparati	on Method: El	PA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	0.0107	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	0.00237	mg/L	0.0003	0.001	
* Chromium, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	0.0722	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:	:30	1.015	7.96	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14	:27	10.15	11.8	mg/L	0.01015	0.05075	
* Selenium, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	0.00278	mg/L	0.002	0.01	J
* Thallium, Total	8/7/20 12:54	8/10/20 11:	:54	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anai	lyst: DLJ							
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15	:52	10.15	11.6	mg/L	0.01015	0.05075	
Analytical Method: EPA 245.1	Anai	lyst: GAS							
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:	:54	1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anai	lyst: JAG							
Alkalinity, Total as CaCO3	8/14/20 10:00	-	:05	1	15.0	mg/L		0.1	
Analytical Method: SM 2540C		lyst: TJW				-			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12	20	1	2200	mg/L		125	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-1L

Location Code:

WMWGORG 8/3/20 11:45

Collected:

Customer ID: Submittal Date:

8/6/20 11:01

Laboratory ID Number: BA14557

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	15.2	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	0.00	mg/L			
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 13:16	8/10/20 13:1	6	1	2.05	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 12:17	8/11/20 12:1	7	1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 12:43	8/7/20 12:43	3 ;	50	1370	mg/L	25.00	50	
Analytical Method: Field Measurements	Anal	yst: TJD							
Conductivity	8/3/20 11:38	8/3/20 11:38	3		1647.17	uS/cm			FA
рН	8/3/20 11:38	8/3/20 11:38	3		5.08	SU			FA
Temperature	8/3/20 11:38	8/3/20 11:38	3		20.09	С			FA
Turbidity	8/3/20 11:38	8/3/20 11:38	3		2.06	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 11:45

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-1L

Laboratory ID Number: BA14557

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mi
3A14560 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
3A14560 Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
3A14560 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
3A14560 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
3A14560 Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560 Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
3A14560 Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
3A14560 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560 Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14560 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560 Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20
3A14560 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
3A14560 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14563 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20
3A14560 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
3A14560 Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
3A14560 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
3A14560 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
3A14563 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 11:45

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-1L

Laboratory ID Number: BA14557

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14565	Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14560	Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	30 to 120	6.61	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14560	Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	30 to 120	1.30	20
BA14560	Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	30 to 120	0.855	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-1L DUPLocation Code:WMWGORGCollected:8/3/20 11:45

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14558

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Ana	lyst: RDA		Preparat	ion Method: I	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:3	35 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 12:	54 10.15	148	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 10:	35 1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	8/10/20 15:00	8/12/20 10:3	35 1.015	0.0262	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:	54 10.15	282	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 10:3	35 1.015	37.7	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Ana	lyst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 11:4	42 1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	Ana	lyst: DLJ		Preparat	ion Method: I	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 11:	57 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 11:	57 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 11:	57 1.015	0.0103	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 11:	57 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 11:	57 1.015	0.00219	mg/L	0.0003	0.001	
* Chromium, Total	8/7/20 12:54	8/10/20 11:	57 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 11:	57 1.015	0.0711	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 11:	57 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 11:	57 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:3	33 1.015	8.03	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:3	37 10.15	11.8	mg/L	0.01015	0.05075	
* Selenium, Total	8/7/20 12:54	8/10/20 11:	57 1.015	0.00245	mg/L	0.002	0.01	J
* Thallium, Total	8/7/20 12:54	8/10/20 11:	57 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Ana	lyst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:	54 10.15	11.9	mg/L	0.01015	0.05075	
Analytical Method: EPA 245.1	Ana	lyst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 13:	56 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Ana	lyst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00	8/14/20 11:0	05 1	14.8	mg/L		0.1	
Analytical Method: SM 2540C	Ana	lyst: TJW						
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:	20 1	2200	mg/L		125	
	5,.,25 . 1.20		•		0			

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-1L DUPLocation Code:WMWGORGCollected:8/3/20 11:45

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14558

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	14.8	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	0.00	mg/L			
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 13:17	8/10/20 13:1	7	1	2.06	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 12:18	8/11/20 12:1	8	1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 12:45	8/7/20 12:45	;	50	1480	mg/L	25.00	50	
Analytical Method: Field Measurements	Anal	yst: TJD							
Conductivity	8/3/20 11:38	8/3/20 11:38	}		1647.17	uS/cm			FA
рН	8/3/20 11:38	8/3/20 11:38	}		5.08	SU			FA
Temperature	8/3/20 11:38	8/3/20 11:38	}		20.09	С			FA
Turbidity	8/3/20 11:38	8/3/20 11:38	;		2.06	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 11:45

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-1L DUP

Laboratory ID Number: BA14558

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mi
BA14560 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
BA14560 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560 Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14560 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
BA14560 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560 Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
BA14560 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
BA14560 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
BA14560 Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560 Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
BA14560 Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560 Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
BA14563 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20
BA14560 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560 Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20
BA14560 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
BA14560 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14563 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 11:45

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-1L DUP

Laboratory ID Number: BA14558

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14565	Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14560	Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	30 to 120	6.61	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14560	Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	30 to 120	1.30	20
BA14560	Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	30 to 120	0.855	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-2LLocation Code:WMWGORGCollected:8/3/20 12:55

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14559

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	yst: RDA		Preparat	on Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:3	8 1.015	0.0317	mg/L	0.03	0.1	J
* Calcium, Total	8/10/20 15:00	8/12/20 12:5	7 10.15	172	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 12:5	7 10.15	6.07	mg/L	0.203	0.5075	
* Lithium, Total	8/10/20 15:00	8/12/20 10:3	8 1.015	0.0611	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:5	7 10.15	194	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 10:3	8 1.015	24.6	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 13:5	4 10.15	6.03	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	on Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	0.0147	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	0.0589	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:3	6 1.015	6.59	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:4	0 10.15	8.34	mg/L	0.01015	0.05075	
* Selenium, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 12:0	0 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 15:5	7 10.15	8.63	mg/L	0.01015	0.05075	
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	•	9 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00	•	5 1	204	mg/L		0.1	
Analytical Method: SM 2540C		yst: TJW			-			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	1650	mg/L		100	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-2LLocation Code:WMWGORGCollected:8/3/20 12:55

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14559

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	204	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	5	1	0.03	mg/L			
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 13:18	8/10/20 13:1	8	1	4.03	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 12:20	8/11/20 12:2	.0	1	0.122	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 12:46	8/7/20 12:46	, 4	40	907	mg/L	20.00	40	
Analytical Method: Field Measurements	Anal	yst: TJD							
Conductivity	8/3/20 12:51	8/3/20 12:51			1280.91	uS/cm			FA
рН	8/3/20 12:51	8/3/20 12:51			5.95	SU			FA
Temperature	8/3/20 12:51	8/3/20 12:51			20.21	С			FA
Turbidity	8/3/20 12:51	8/3/20 12:51			3.65	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 12:55

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum - MW-2L

Laboratory ID Number: BA14559

•			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	l Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14560 Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
BA14560 Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560 Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
BA14560 Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560 Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
BA14560 Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
BA14560 Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
BA14560 Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560 Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
BA14560 Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560 Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14560 Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560 Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20
BA14560 Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
BA14560 Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14563 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20
BA14560 Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560 Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560 Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560 Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
BA14563 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date:

8/3/20 12:55

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum - MW-2L

Laboratory ID Number: BA14559

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	Limit
BA14565	Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14560	Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	30 to 120	6.61	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14560	Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	30 to 120	1.30	20
BA14560	Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	30 to 120	0.855	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3LLocation Code:WMWGORGCollected:8/3/20 14:28

Customer ID:

Laboratory ID Number: BA14560 Submittal Date: 8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Prepar	ation Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 10:4	1.015	0.0424	mg/L	0.03	0.1	J
* Calcium, Total	8/10/20 15:00	8/12/20 13:0	00 20.3	285	mg/L	2.03	10.15	R/
* Iron, Total	8/10/20 15:00	8/12/20 13:0	00 20.3	12.6	mg/L	0.406	1.015	R/
* Lithium, Total	8/10/20 15:00	8/12/20 10:4	1.015	0.270	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 13:0	00 20.3	432	mg/L	2.03	10.15	R/
* Sodium, Total	8/10/20 15:00	8/12/20 13:0	00 20.3	35.4	mg/L	2.03	10.15	
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 14:0	10.15	6.25	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Prepar	ation Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:0	1.015	Not Detecte	ed mg/L	8000.0	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:0	1.015	0.00426	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 12:0	1.015	0.0166	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:0	1.015	0.00405	mg/L	0.0006	0.003	
* Cadmium, Total	8/7/20 12:54	8/10/20 12:0	1.015	0.00652	mg/L	0.0003	0.001	
* Chromium, Total	8/7/20 12:54	8/10/20 12:0	1.015	Not Detecte	d mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:0	1.015	0.640	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 12:0	1.015	0.00200	mg/L	0.001	0.005	J
* Molybdenum, Total	8/7/20 12:54	8/10/20 12:0	1.015	Not Detecte	d mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:3	1.015	8.68	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:4	92.36	5 11.9	mg/L	0.092365	0.461825	R/
* Selenium, Total	8/7/20 12:54	8/10/20 12:0	1.015	0.0146	mg/L	0.002	0.01	
* Thallium, Total	8/7/20 12:54	8/10/20 12:0	1.015	Not Detecte	d mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 16:0	92.36	5 12.4	mg/L	0.092365	0.461825	
Analytical Method: EPA 245.1	Anal	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20)1 1	Not Detecte	d mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00	•)5 1	8.32	mg/L		0.1	
Analytical Method: SM 2540C		yst: TJW			•			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	20 1	3760	mg/L		250	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix spike recovery for Fluoride was outside of the specification limit. LBM 8/19/2020

Certificate Of Analysis



Description: Gorgas Gypsum - MW-3LLocation Code:WMWGORGCollected:8/3/20 14:28

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14560

Name	Prepared	Analyzed	Vio Spec D)F	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Ana	lyst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5 1		8.32	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5 1		0.00	mg/L			
Analytical Method: SM4500Cl E	Ana	lyst: JCC							
* Chloride	8/10/20 13:19	8/10/20 13:1	9 1		1.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Ana	lyst: JCC							
* Fluoride	8/11/20 12:21	8/11/20 12:2	21 1		0.0766	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	Ana	lyst: JCC							
* Sulfate	8/7/20 12:47	8/7/20 12:47	20	0	2330	mg/L	100.00	200	
Analytical Method: Field Measurements	Ana	lyst: TJD							
Conductivity	8/3/20 14:23	8/3/20 14:23	3		2198.42	uS/cm			FA
рН	8/3/20 14:23	8/3/20 14:23	3		5.06	SU			FA
Temperature	8/3/20 14:23	8/3/20 14:23	3		24.12	С			FA
Turbidity	8/3/20 14:23	8/3/20 14:23	3		6.72	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix spike recovery for Fluoride was outside of the specification limit. LBM 8/19/2020

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/3/20 14:28

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-3L

Laboratory ID Number: BA14560

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14560	Beryllium, Total	mg/L	-0.00000532	0.00088	0.10	0.102	0.0973	0.0878	0.085 to 0.115	98.0	70 to 130	4.72	20
BA14560	Calcium, Total	mg/L	-0.00321	0.1518	5.00	289	281	5.03	4.25 to 5.75	80.0	70 to 130	2.81	20
BA14560	Iron, Total	mg/L	0.00220	0.0176	0.2	12.6	12.4	0.202	0.17 to 0.23	0.00	70 to 130	1.60	20
BA14560	Sodium, Total	mg/L	0.000367	0.044	5.00	39.6	39.0	4.84	4.25 to 5.75	84.0	70 to 130	1.53	20
BA14560	Manganese, Total	mg/L	0.0000036	0.0001474	0.10	11.0	12.3	0.0985	0.085 to 0.115	-900	70 to 130	11.2	20
BA14560	Molybdenum, Total	mg/L	0.00000555	0.0001474	0.10	0.112	0.109	0.0966	0.085 to 0.115	112	70 to 130	2.71	20
BA14560	Thallium, Total	mg/L	0.0000135	0.0001474	0.10	0.115	0.114	0.0999	0.085 to 0.115	115	70 to 130	0.873	20
BA14560	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.116	0.112	0.0962	0.085 to 0.115	109	70 to 130	3.51	20
BA14560	Mercury, Total by CVAA	mg/L	0.0000190	0.0005	0.004	0.00368	0.00359	0.00359	0.0034 to 0.0046	92.0	70 to 130	2.48	20
BA14560	Arsenic, Total	mg/L	0.00000093	0.0001474	0.10	0.122	0.120	0.105	0.085 to 0.115	118	70 to 130	1.65	20
BA14560	Antimony, Total	mg/L	0.000196	0.001	0.10	0.0946	0.0915	0.0872	0.085 to 0.115	94.6	70 to 130	3.33	20
BA14563	Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20
BA14560	Boron, Total	mg/L	0.000558	0.0650254	1.00	1.08	1.08	0.964	0.85 to 1.15	104	70 to 130	0.00	20
BA14560	Chromium, Total	mg/L	-0.0000152	0.00044	0.10	0.117	0.116	0.104	0.085 to 0.115	117	70 to 130	0.858	20
BA14560	Lithium, Total	mg/L	-0.000168	0.0154	0.20	0.529	0.522	0.190	0.17 to 0.23	130	70 to 130	1.33	20
BA14560	Barium, Total	mg/L	0.00000766	0.0002	0.10	0.121	0.124	0.0897	0.085 to 0.115	104	70 to 130	2.45	20
BA14560	Potassium, Total	mg/L	-0.00825	0.3674	10.0	19.7	19.5	10.8	8.5 to 11.5	110	70 to 130	1.02	20
BA14560	Cobalt, Total	mg/L	-0.0000239	0.0001474	0.10	0.735	0.717	0.104	0.085 to 0.115	95.0	70 to 130	2.48	20
BA14560	Magnesium, Total	mg/L	0.000661	0.0462	5.00	434	424	5.13	4.25 to 5.75	40.0	70 to 130	2.33	20
BA14560	Lead, Total	mg/L	0.00000456	0.0001474	0.10	0.122	0.121	0.106	0.085 to 0.115	120	70 to 130	0.823	20
BA14560	Selenium, Total	mg/L	-0.0000679	0.001	0.10	0.124	0.122	0.100	0.085 to 0.115	109	70 to 130	1.63	20
BA14563	Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix spike recovery for Fluoride was outside of the specification limit. LBM 8/19/2020

Batch QC Summary



Customer Account: WMWGORG Sample Date:

8/3/20 14:28

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-3L

Laboratory ID Number: BA14560

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	Limit
BA14565	Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14560	Fluoride	mg/L	0.00346	0.05	2.50	1.22	0.0776	2.33	2.25 to 2.75	45.7 8	30 to 120	1.30	20
BA14560	Sulfate	mg/L	-0.449	0.50	4000	6090	2350	18.2	18 to 22	94.0 8	30 to 120	0.855	20
BA14560	Chloride	mg/L	0.0166	0.50	10.0	11.1	1.25	10.2	9 to 11	99.3 8	30 to 120	6.61	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix spike recovery for Fluoride was outside of the specification limit. LBM 8/19/2020

Certificate Of Analysis



Description: Gorgas Gypsum - MW-11HLocation Code:WMWGORGCollected:8/4/20 09:35

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14561

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	yst: RDA		Preparati	ion Method: I	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:0	2 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 11:4	5 10.15	139	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 11:0	2 1.015	1.62	mg/L	0.02	0.05	
* Lithium, Total	8/10/20 15:00	8/12/20 11:0	2 1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	8/10/20 15:00	8/12/20 11:4	5 10.15	126	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 11:4	5 10.15	44.0	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	Analy	yst: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 11:5	1 1.015	1.41	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	Analy	yst: DLJ		Preparati	ion Method: I	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	0.0138	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	0.00610	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 12:5	9 1.015	1.14	mg/L	0.3	2.5	J
* Manganese, Total	8/7/20 12:54	8/11/20 14:5	0 5.075	2.05	mg/L	0.005075	0.025375	
* Selenium, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 12:2	3 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Analy	yst: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 16:0	2 5.075	2.16	mg/L	0.005075	0.025375	
Analytical Method: EPA 245.1	Analy	yst: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 14:1	7 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Analy	yst: JAG						
Alkalinity, Total as CaCO3	8/14/20 10:00		5 1	93.0	mg/L		0.1	
Analytical Method: SM 2540C		yst: TJW			-			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:2	0 1	1230	mg/L		83.3	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-11H

Location Code:

WMWGORG 8/4/20 09:35

Collected:

Customer ID: Submittal Date:

8/6/20 11:01

Laboratory ID Number: BA14561				3	ubmittai Date:	6/6/20 113	JI	
Name	Prepared	Analyzed	Vio Spec D	F Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	lyst: JAG						
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	05 1	93.0	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0	05 1	0.01	mg/L			
Analytical Method: SM4500CI E	Anal	yst: JCC						
* Chloride	8/10/20 13:31	8/10/20 13:3	31 1	4.51	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	lyst: JCC						
* Fluoride	8/11/20 12:32	8/11/20 12:3	32 1	0.109	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	lyst: JCC						
* Sulfate	8/7/20 13:30	8/7/20 13:30	40	694	mg/L	20.00	40	
Analytical Method: Field Measurements	Anal	lyst: TJD						
Conductivity	8/4/20 09:29	8/4/20 09:29	9	1267.3	7 uS/cm			FA
рН	8/4/20 09:29	8/4/20 09:29	9	5.74	SU			FA
Temperature	8/4/20 09:29	8/4/20 09:29	9	20.41	С			FA
Turbidity	8/4/20 09:29	8/4/20 09:29	9	9.44	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 09:35

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BA14561

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570 Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14570 Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iron, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Mercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20
BA14570 Boron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14563 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20
BA14570 Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Potassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14563 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20
BA14570 Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Barium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 Antimony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20
BA14570 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 Sodium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20

Batch QC Summary



Customer Account: WMWGORG Sample Date:

Customer ID:

8/4/20 09:35

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BA14561

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14565 Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14570 Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0	80 to 120	0.00	20
BA14563 Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14570 Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101	80 to 120	0.00	20
BA14570 Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6	80 to 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-11H DUPLocation Code:WMWGORGCollected:8/4/20 09:35

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14562

Name	Prepared	Analyzed V	io Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	st: RDA		Preparati	on Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:05	1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 11:48	10.15	139	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 11:05	1.015	1.70	mg/L	0.02	0.05	
* Lithium, Total	8/10/20 15:00	8/12/20 11:05	1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	8/10/20 15:00	8/12/20 11:48	10.15	126	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 11:48	10.15	44.1	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	Analy	st: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 11:53	1.015	1.38	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	Analy	st: DLJ		Preparati	on Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 12:26	1.015	0.0141	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:26	1.015	0.00615	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 13:02	1.015	1.10	mg/L	0.3	2.5	J
 Manganese, Total 	8/7/20 12:54	8/11/20 14:53	5.075	1.99	mg/L	0.005075	0.025375	
* Selenium, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 12:26	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Analy	st: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 16:05	5.075	2.10	mg/L	0.005075	0.025375	
Analytical Method: EPA 245.1	Analy	st: GAS						
 Mercury, Total by CVAA 	8/11/20 09:20	8/11/20 14:20	1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Analy	st: JAG						
Alkalinity, Total as CaCO3	-	8/14/20 11:05	1	79.5	mg/L		0.1	
Analytical Method: SM 2540C	Analy	/st: TJW						
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:20	1	1230	mg/L		83.3	

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

Laboratory ID Number: BA14562

Certificate Of Analysis



Location Code: WMWGORG Description: Gorgas Gypsum - MW-11H DUP Collected:

Customer ID:

8/4/20 09:35

Submittal Date: 8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Ana	lyst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5 1		79.5	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5 1		0.01	mg/L			
Analytical Method: SM4500Cl E	Ana	lyst: JCC							
* Chloride	8/10/20 13:32	8/10/20 13:3	32 1		4.47	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Ana	lyst: JCC							
* Fluoride	8/11/20 12:33	8/11/20 12:3	33 1		0.0952	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	Ana	lyst: JCC							
* Sulfate	8/7/20 13:31	8/7/20 13:31	4	0	734	mg/L	20.00	40	
Analytical Method: Field Measurements	Ana	lyst: TJD							
Conductivity	8/4/20 09:29	8/4/20 09:29)		1267.37	uS/cm			FA
рН	8/4/20 09:29	8/4/20 09:29)		5.74	SU			FA
Temperature	8/4/20 09:29	8/4/20 09:29)		20.41	С			FA
Turbidity	8/4/20 09:29	8/4/20 09:29)		9.44	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 09:35

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-11H DUP

Laboratory ID Number: BA14562

	•		MB		•	•		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570 Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14563 Manganese, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20
BA14570 Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Boron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14570 Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iron, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Mercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20
BA14570 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 Sodium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20
BA14570 Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Potassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14563 Iron, Dissolved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20
BA14570 Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Barium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 Antimony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date:

8/4/20 09:35

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-11H DUP

Laboratory ID Number: BA14562

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570	Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6	80 to 120	0.00	20
BA14565	Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14570	Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0	80 to 120	0.00	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14570	Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101	80 to 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-13HLocation Code:WMWGORGCollected:8/4/20 11:10

Customer ID:

Laboratory ID Number: BA14563 Submittal Date: 8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method: E	PA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:	08	1.015	0.263	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 11:	51	20.3	192	mg/L	2.03	10.15	
* Iron, Total	8/10/20 15:00	8/12/20 11:	51	20.3	42.5	mg/L	0.406	1.015	
* Lithium, Total	8/10/20 15:00	8/12/20 11:	08	1.015	0.0534	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 11:	51	20.3	113	mg/L	2.03	10.15	
* Sodium, Total	8/10/20 15:00	8/12/20 11:	51	20.3	53.8	mg/L	2.03	10.15	
Analytical Method: EPA 200.7	Anal	yst: RDA							
* Iron, Dissolved	8/10/20 13:30	8/11/20 14:	06	101.5	37.2	mg/L	2.03	5.075	R
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method: E	PA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:	28	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:	28	1.015	0.103	mg/L	0.001	0.005	
* Barium, Total	8/7/20 12:54	8/10/20 12:	28	1.015	0.0275	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:	28	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 12:	28	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 12:	28	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:	28	1.015	0.111	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 12:	28	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 12:	28	1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 13:	04	1.015	6.20	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:	56	92.365	12.3	mg/L	0.092365	0.461825	
* Selenium, Total	8/7/20 12:54	8/10/20 12:	28	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 12:	28	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ							
* Manganese, Dissolved	8/7/20 14:00	8/11/20 16:	08	92.365	13.0	mg/L	0.092365	0.461825	RA
Analytical Method: EPA 245.1	Anal	yst: GAS							
* Mercury, Total by CVAA	8/11/20 09:20	•	22	1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG							
Alkalinity, Total as CaCO3	8/14/20 10:00		05	1	113	mg/L		0.1	
Analytical Method: SM 2540C		yst: TJW				-			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:	20	1	1350	mg/L		100	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-13H

Location Code:

WMWGORG 8/4/20 11:10

Collected:

Customer ID: Submittal Date:

8/6/20 11:01

Laboratory ID Number: BA14563					Subn	nittai Date:	8/6/20 11:0) 1	
Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	113	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 10:00	8/14/20 11:0)5	1	0.01	mg/L			
Analytical Method: SM4500CI E	Anal	yst: JCC							
* Chloride	8/10/20 13:33	8/10/20 13:3	33	1	12.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 12:35	8/11/20 12:3	35	1	0.113	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 13:32	8/7/20 13:32	2	40	773	mg/L	20.00	40	
Analytical Method: Field Measurements	Anal	yst: TJD							
Conductivity	8/4/20 11:05	8/4/20 11:05	5		1199.6	uS/cm			FA
рН	8/4/20 11:05	8/4/20 11:05	5		5.89	SU			FA
Temperature	8/4/20 11:05	8/4/20 11:05	5		20.11	С			FA
Turbidity	8/4/20 11:05	8/4/20 11:05	5		4.08	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 11:10

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BA14563

				MB					Standard		Rec		Prec
Sample Analysis		Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570 Manganes	e, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Selenium,	Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Thallium,	Γotal	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14570 Cobalt, To	tal	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Potassium	, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Magnesiur	n, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14563 Manganes	e, Dissolved	mg/L	0.0000168	0.0001474	0.10	13.2	13.0	0.103	0.085 to 0.115	200	70 to 130	1.53	20
BA14570 Molybdenu	um, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Boron, Tot	al	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Calcium, T	otal	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Chromium	, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14570 Beryllium,	Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iron, Total		mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Mercury, T	otal by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20
BA14563 Iron, Disso	olved	mg/L	-0.000944	0.0176	0.2	37.5	37.5	0.206	0.17 to 0.23	150	70 to 130	0.00	20
BA14570 Arsenic, To	otal	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Barium, To	otal	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Lithium, To	otal	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 Antimony,	Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20
BA14570 Cadmium,	Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 Sodium, T	otal	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Lead, Tota	al	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 11:10

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BA14563

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14565	Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14570	Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0	80 to 120	0.00	20
BA14563	Alkalinity, Total as CaCO3	mg/L					116	49.0	45.0 to 55.0			2.72	10
BA14570	Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101 8	80 to 120	0.00	20
BA14570	Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6	80 to 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-9HLocation Code:WMWGORGCollected:8/4/20 12:20

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14564

Name	Prepared	Analyzed '	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	st: RDA		Preparati	on Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:11	1.015	8.53	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 11:54	10.15	346	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 11:54	10.15	22.1	mg/L	0.203	0.5075	
* Lithium, Total	8/10/20 15:00	8/12/20 11:11	1.015	0.166	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 11:54	10.15	244	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 11:54	10.15	140	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	Analy	st: RDA						
* Iron, Dissolved	8/10/20 13:30	8/11/20 14:15	101.5	21.5	mg/L	2.03	5.075	
Analytical Method: EPA 200.8	Analy	st: DLJ		Preparati	on Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:31	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:31	1.015	0.00137	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 12:31	1.015	0.0153	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:31	1.015	0.000882	mg/L	0.0006	0.003	J
* Cadmium, Total	8/7/20 12:54	8/10/20 12:31	1.015	0.000308	mg/L	0.0003	0.001	J
* Chromium, Total	8/7/20 12:54	8/10/20 12:31	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:31	1.015	0.178	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 12:31	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 12:31	1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 13:07	1.015	8.97	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 14:58	92.365	21.5	mg/L	0.092365	0.461825	
* Selenium, Total	8/7/20 12:54	8/10/20 12:31	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 12:31	1.015	0.000265	mg/L	0.0002	0.001	J
Analytical Method: EPA 200.8	Analy	st: DLJ						
* Manganese, Dissolved	8/7/20 14:00	8/11/20 16:23	92.365	22.8	mg/L	0.092365	0.461825	
Analytical Method: EPA 245.1	Analy	st: GAS						
* Mercury, Total by CVAA	8/11/20 09:20		5 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		/st: JAG						
Alkalinity, Total as CaCO3	8/14/20 11:06) 1	49.8	mg/L		0.1	
Analytical Method: SM 2540C		/st: TJW	· •		Ü			
* Solids, Dissolved	8/7/20 14:25	8/11/20 12:20) 1	2920	mg/L		156.2	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-9HLocation Code:WMWGORGCollected:8/4/20 12:20

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14564

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:3	0	1	49.8	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:3	0	1	0.00	mg/L			
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	8/10/20 13:42	8/10/20 13:4	2	10	109	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	8/11/20 12:36	8/11/20 12:3	6	1	0.127	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	yst: JCC							
* Sulfate	8/7/20 13:33	8/7/20 13:33	}	100	1790	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	yst: TJD							
Conductivity	8/4/20 12:15	8/4/20 12:15	;		2019.87	uS/cm			FA
рН	8/4/20 12:15	8/4/20 12:15	i		5.33	SU			FA
Temperature	8/4/20 12:15	8/4/20 12:15	i		22.10	С			FA
Turbidity	8/4/20 12:15	8/4/20 12:15	i		8.29	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 12:20

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BA14564

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14569 Manganese, Dissolved	mg/L	0.000120	0.0001474	0.10	5.36	5.25	0.0999	0.085 to 0.115	260	70 to 130	2.07	20
BA14570 Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14570 Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Potassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14570 Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iron, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Mercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20
BA14569 Iron, Dissolved	mg/L	-0.000578	0.0176	0.2	38.3	37.9	0.208	0.17 to 0.23	-50.0	70 to 130	1.05	20
BA14570 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 Sodium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20
BA14570 Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Barium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 Antimony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20
BA14570 Boron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date: 8/4/20 12:20

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BA14564

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14565 Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14570 Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101	80 to 120	0.00	20
BA14570 Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0	80 to 120	0.00	20
BA14569 Alkalinity, Total as CaCO3	mg/L					43.8	49.0	45.0 to 55.0			2.26	10
BA14570 Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6	80 to 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-9VLocation Code:WMWGORGCollected:8/4/20 15:30

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14565					Submit	al Date:	8/6/20 11:01		
Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method: E	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11	:13	1.015	0.149	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 11	:57	20.3	434	mg/L	2.03	10.15	
* Iron, Total	8/10/20 15:00	8/12/20 11	:13	1.015	0.464	mg/L	0.02	0.05	
* Lithium, Total	8/10/20 15:00	8/12/20 11	:13	1.015	0.364	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 11	:57	20.3	183	mg/L	2.03	10.15	
* Sodium, Total	8/10/20 15:00	8/12/20 11	:57	20.3	315	mg/L	2.03	10.15	
Analytical Method: EPA 200.7	Anal	yst: RDA							
* Iron, Dissolved	8/10/20 13:30	8/11/20 12	:20	1.015	0.407	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method: E	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12	:34	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12	:34	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 12	:34	1.015	0.0155	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12	:34	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 12	:34	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 12	:34	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12	:34	1.015	0.00412	mg/L	0.002	0.005	J
* Lead, Total	8/7/20 12:54	8/10/20 12	:34	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 12	:34	1.015	0.00423	mg/L	0.002	0.01	J
* Potassium, Total	8/7/20 12:54	8/11/20 13	:10	1.015	9.01	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 15	:01	5.075	1.71	mg/L	0.005075	0.025375	
* Selenium, Total	8/7/20 12:54	8/10/20 12	:34	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 12	:34	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ							
* Manganese, Dissolved	8/7/20 14:00	8/11/20 16	:26	5.075	1.82	mg/L	0.005075	0.025375	
Analytical Method: EPA 245.1	Anal	yst: GAS							
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 14	:27	1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	Anal	yst: JAG							
Alkalinity, Total as CaCO3	8/14/20 11:06	8/14/20 11	:30	1	301	mg/L		0.1	
Analytical Method: SM 2540C	Anal	yst: TJW							
* Solids, Dissolved	8/7/20 14:25	8/11/20 12	.20	1	3080	mg/L		250	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-9V

Location Code: Collected:

WMWGORG 8/4/20 15:30

Customer ID:

Submittal Date:

8/6/20 11:01

Laboratory ID Number: BA14565					Subn	iittai Date:	8/6/20 11:0) 1	
Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anal	lyst: JAG							_
Bicarbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:3	30	1	301	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:3	30	1	0.32	mg/L			
Analytical Method: SM4500CI E	Anal	lyst: JCC							
* Chloride	8/10/20 13:43	8/10/20 13:4	13	10	58.6	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	Anal	lyst: JCC							
* Fluoride	8/11/20 12:37	8/11/20 12:3	37	1	0.135	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Anal	lyst: JCC							
* Sulfate	8/7/20 13:34	8/7/20 13:34	1	100	1700	mg/L	50.00	100	
Analytical Method: Field Measurements	Anal	lyst: TJD							
Conductivity	8/4/20 15:29	8/4/20 15:29)		2563.32	uS/cm			FA
рН	8/4/20 15:29	8/4/20 15:29)		6.88	SU			FA
Temperature	8/4/20 15:29	8/4/20 15:29)		25.02	С			FA
Turbidity	8/4/20 15:29	8/4/20 15:29)		3.07	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/4/20 15:30

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BA14565

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14569 Manganese, Dissolved	mg/L	0.000120	0.0001474	0.10	5.36	5.25	0.0999	0.085 to 0.115	260	70 to 130	2.07	20
BA14570 Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14569 Iron, Dissolved	mg/L	-0.000578	0.0176	0.2	38.3	37.9	0.208	0.17 to 0.23	-50.0	70 to 130	1.05	20
BA14570 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 Sodium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20
BA14570 Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Potassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14570 Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Barium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 Antimony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20
BA14570 Boron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14570 Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iron, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Mercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20

Batch QC Summary



Customer Account: WMWGORG

Customer ID:

Sample Date: 8/4/20 15:30

Customer ib.

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BA14565

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14565 Solids, Dissolved	mg/L	0.0000	25			3110	52.0	40 to 60			0.485	5
BA14570 Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0	80 to 120	0.00	20
BA14570 Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101	80 to 120	0.00	20
BA14569 Alkalinity, Total as CaCO3	mg/L					43.8	49.0	45.0 to 55.0			2.26	10
BA14570 Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6	80 to 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4LLocation Code:WMWGORGCollected:8/5/20 09:55

Customer ID:

Laboratory ID Number: BA14566 Submittal Date: 8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:1	6 1	1.015	0.0459	mg/L	0.03	0.1	J
* Calcium, Total	8/10/20 15:00	8/12/20 12:0	0 2	20.3	281	mg/L	2.03	10.15	
* Iron, Total	8/10/20 15:00	8/12/20 11:1	6 1	1.015	0.0713	mg/L	0.02	0.05	
* Lithium, Total	8/10/20 15:00	8/12/20 11:1	6 1	1.015	0.0519	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:0	0 2	20.3	459	mg/L	2.03	10.15	
* Sodium, Total	8/10/20 15:00	8/12/20 11:1	6 1	1.015	35.2	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Anal	yst: RDA							
* Iron, Dissolved	8/10/20 13:30	8/11/20 12:2	3 1	1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method: I	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	0.0125	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 13:1	2 1	1.015	8.89	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	0.00295	mg/L	0.001	0.005	J
* Selenium, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	0.00232	mg/L	0.002	0.01	J
* Thallium, Total	8/7/20 12:54	8/10/20 12:3	6 1	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ							
* Manganese, Dissolved	8/7/20 14:00	8/10/20 11:5	8 1	1.015	Not Detected	mg/L	0.001	0.005	U
Analytical Method: EPA 245.1	Anal	yst: GAS							
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 14:2	.9 1	1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		yst: JAG							
Alkalinity, Total as CaCO3	8/14/20 11:06	8/14/20 11:3	so 1	1	168	mg/L		0.1	
Analytical Method: SM 2540C		yst: TJW							
* Solids, Dissolved	8/10/20 12:25	-	in 1	1	3200	mg/L		156.2	

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

Certificate Of Analysis



FΑ

FΑ

FΑ

FΑ

Description: Gorgas Gypsum - MW-4L

Location Code:

WMWGORG

Collected:

2442.43

6.15

20.77

4.87

Customer ID: Submittal Date:

uS/cm

SU

С

NTU

8/5/20 09:55

8/6/20 11:01

Laboratory ID Number: BA14566

Conductivity

Temperature

Turbidity

рΗ

MDL Q Results Units RL Name Prepared Analyzed Vio Spec DF Analytical Method: SM 4500CO2 D Analyst: JAG Bicarbonate Alkalinity, (calc.) 8/14/20 11:06 8/14/20 11:30 168 mg/L 1 Carbonate Alkalinity, (calc.) 8/14/20 11:06 8/14/20 11:30 1 0.05 mg/L Analyst: JCC Analytical Method: SM4500CI E * Chloride 8/10/20 13:37 8/10/20 13:37 1.57 mg/L 0.50 1 Analyst: JCC Analytical Method: SM4500F G 2017 mg/L 0.1 * Fluoride 8/11/20 12:38 8/11/20 12:38 0.359 0.06 Analytical Method: SM4500SO4 E 2011 Analyst: JCC mg/L 50.00 100 * Sulfate 8/7/20 13:36 100 1930 8/7/20 13:36 Analytical Method: Field Measurements Analyst: TJD

8/5/20 09:52

8/5/20 09:52

8/5/20 09:52

8/5/20 09:52

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 8/19/2020

8/5/20 09:52

8/5/20 09:52

8/5/20 09:52

8/5/20 09:52

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 09:55

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-4L

Laboratory ID Number: BA14566

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570 Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Boron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14570 Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iron, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Mercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20
BA14570 Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14570 Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Potassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14569 Iron, Dissolved	mg/L	-0.000578	0.0176	0.2	38.3	37.9	0.208	0.17 to 0.23	-50.0	70 to 130	1.05	20
BA14570 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 Sodium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20
BA14570 Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Barium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 Antimony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20
BA14569 Manganese, Dissolved	mg/L	0.000120	0.0001474	0.10	5.36	5.25	0.0999	0.085 to 0.115	260	70 to 130	2.07	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date:

8/5/20 09:55

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum - MW-4L

Laboratory ID Number: BA14566

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570	Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0	80 to 120	0.00	20
BA14570	Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101	80 to 120	0.00	20
BA14569	Alkalinity, Total as CaCO3	mg/L					43.8	49.0	45.0 to 55.0			2.26	10
BA14570	Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6	80 to 120	0.00	20
BA14566	Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5

Certificate Of Analysis



Description: Gorgas Gypsum - MW-14HLocation Code:WMWGORGCollected:8/5/20 11:10

Customer ID:

Laboratory ID Number: BA14567 Submittal Date: 8/6/20 11:01

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method: I	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:1	9 1	1.015	0.158	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 12:0	3 1	10.15	141	mg/L	1.015	5.075	
* Iron, Total	8/10/20 15:00	8/12/20 12:0	3 1	10.15	14.6	mg/L	0.203	0.5075	
* Lithium, Total	8/10/20 15:00	8/12/20 11:1	9 1	1.015	0.512	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:0	3 1	10.15	104	mg/L	1.015	5.075	
* Sodium, Total	8/10/20 15:00	8/12/20 11:1	9 1	1.015	17.9	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Anal	yst: RDA							
* Iron, Dissolved	8/10/20 13:30	8/11/20 14:1	8 1	10.15	12.6	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method: I	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	0.00181	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	0.0113	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	0.00879	mg/L	0.0006	0.003	
* Cadmium, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	0.00180	mg/L	0.0003	0.001	
* Chromium, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	0.237	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	0.00122	mg/L	0.001	0.005	J
 Molybdenum, Total 	8/7/20 12:54	8/10/20 12:3	9 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 13:1	5 1	1.015	3.92	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/11/20 15:0	4 1	10.15	9.48	mg/L	0.01015	0.05075	
* Selenium, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	0.00571	mg/L	0.002	0.01	J
* Thallium, Total	8/7/20 12:54	8/10/20 12:3	9 1	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ							
* Manganese, Dissolved	8/7/20 14:00	8/11/20 16:2	9 1	10.15	10.2	mg/L	0.01015	0.05075	
Analytical Method: EPA 245.1	Anal	yst: GAS							
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 14:3	2 1	I	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		yst: JAG							
Alkalinity, Total as CaCO3	8/14/20 11:06		0 1	I	NA	mg/L		0.10	
Analytical Method: SM 2540C		yst: TJW				Ü			
* Solids, Dissolved	8/10/20 12:25	•	n 1	1	1280	mg/L		83.3	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-14H

Location Code:

WMWGORG

Collected:

Customer ID:

8/5/20 11:10

8/6/20 11:01

Laboratory ID Number: BA14567

Submittal Date:

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Anai	lyst: JAG	·					
Bicarbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:3	30 1	NA	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:3	30 1	NA	mg/L			
Analytical Method: SM4500Cl E	Anai	lyst: JCC						
* Chloride	8/10/20 13:38	8/10/20 13:3	38 1	3.28	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	Anai	lyst: JCC						
* Fluoride	8/11/20 12:39	8/11/20 12:3	39 1	0.0820	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	Anai	lyst: JCC						
* Sulfate	8/7/20 13:37	8/7/20 13:37	7 40	796	mg/L	20.00	40	
Analytical Method: Field Measurements	Anai	lyst: TJD						
Conductivity	8/5/20 11:06	8/5/20 11:06	5	1379.37	uS/cm			FA
рН	8/5/20 11:06	8/5/20 11:06	5	3.83	SU			FA
Temperature	8/5/20 11:06	8/5/20 11:06	5	20.84	С			FA
Turbidity	8/5/20 11:06	8/5/20 11:06	3	2.93	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 11:10

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BA14567

				MB					Standard		Rec		Prec
S <u>ample An</u>	nalysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14569 Ma	anganese, Dissolved	mg/L	0.000120	0.0001474	0.10	5.36	5.25	0.0999	0.085 to 0.115	260	70 to 130	2.07	20
BA14570 Mo	olybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Ma	anganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Se	lenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Th	allium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14570 Bo	oron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Ca	alcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Ch	romium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14570 Ars	senic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Ba	arium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Litl	hium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 An	timony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20
BA14570 Be	eryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iro	n, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Me	ercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20
BA14570 Co	balt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Po	otassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Ma	agnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14569 Iro	n, Dissolved	mg/L	-0.000578	0.0176	0.2	38.3	37.9	0.208	0.17 to 0.23	-50.0	70 to 130	1.05	20
BA14570 Ca	ndmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 So	odium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Le	ad, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 11:10

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BA14567

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14566	Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14570	Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101	80 to 120	0.00	20
BA14569	Alkalinity, Total as CaCO3	mg/L					43.8	49.0	45.0 to 55.0			2.26	10
BA14570	Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6	80 to 120	0.00	20
BA14570	Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0	80 to 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4Location Code:WMWGORGCollected:8/5/20 12:08

Customer ID:

Submittal Date: 8/6/20 11:01

Prepared								
Fiehaled	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analy	yst: RDA			Preparati	on Method: El	PA 1638		
8/10/20 15:00	8/12/20 11:2	22	1.015	2.51	mg/L	0.03	0.1	
8/10/20 15:00	8/12/20 12:0	06	10.15	94.7	mg/L	1.015	5.075	
8/10/20 15:00	8/12/20 12:0	06	10.15	12.6	mg/L	0.203	0.5075	
8/10/20 15:00	8/12/20 11:2	22	1.015	0.273	mg/L	0.01	0.02	
8/10/20 15:00	8/12/20 12:0	06	10.15	83.0	mg/L	1.015	5.075	
8/10/20 15:00	8/12/20 11:2	22	1.015	13.8	mg/L	0.1	0.5	
Analy	yst: RDA							
8/10/20 13:30	8/11/20 14:2	20	10.15	10.6	mg/L	0.203	0.5075	
Analy	yst: DLJ			Preparati	on Method: El	PA 1638		
8/7/20 12:54	8/10/20 12:4	41	1.015	Not Detected	mg/L	0.0008	0.003	U
8/7/20 12:54	8/10/20 12:4	41	1.015	0.00115	mg/L	0.001	0.005	J
8/7/20 12:54	8/10/20 12:4	41	1.015	0.0142	mg/L	0.002	0.01	
8/7/20 12:54	8/10/20 12:4	41	1.015	0.00385	mg/L	0.0006	0.003	
8/7/20 12:54	8/10/20 12:4	41	1.015	0.00157	mg/L	0.0003	0.001	
8/7/20 12:54	8/10/20 12:4	41	1.015	Not Detected	mg/L	0.002	0.01	U
8/7/20 12:54	8/10/20 12:4	41	1.015	0.235	mg/L	0.002	0.005	
8/7/20 12:54	8/10/20 12:4	41	1.015	Not Detected	mg/L	0.001	0.005	U
8/7/20 12:54	8/10/20 12:4	41	1.015	Not Detected	mg/L	0.002	0.01	U
8/7/20 12:54	8/11/20 13:	18	1.015	4.41	mg/L	0.3	2.5	
8/7/20 12:54	8/11/20 15:0	07	10.15	8.89	mg/L	0.01015	0.05075	
8/7/20 12:54	8/10/20 12:4	41	1.015	0.00298	mg/L	0.002	0.01	J
8/7/20 12:54	8/10/20 12:4	41	1.015	0.000205	mg/L	0.0002	0.001	J
Analy	yst: DLJ							
8/7/20 14:00	8/11/20 16:3	31	10.15	9.44	mg/L	0.01015	0.05075	
Analy	yst: GAS							
-		34	1	Not Detected	mg/L	0.0003	0.0005	U
Analy	yst: JAG							
•	•	30	1	NA	mg/L		0.10	
		50	1	938	mg/L		50	
	8/10/20 15:00 8/10/20 15:00 8/10/20 15:00 8/10/20 15:00 8/10/20 15:00 8/10/20 15:00 8/10/20 15:00 Analy 8/10/20 13:30 Analy 8/7/20 12:54 Analy 8/14/20 11:06 Analy	8/10/20 15:00 8/12/20 12:0 8/10/20 15:00 8/12/20 12:0 8/10/20 15:00 8/12/20 11:2 8/10/20 15:00 8/12/20 11:2 8/10/20 15:00 8/12/20 11:2 8/10/20 15:00 8/12/20 11:2 8/10/20 13:30 8/11/20 14:2 Analyst: DLJ 8/7/20 12:54 8/10/20 12:4 8/7/20 12:50 8/11/20 14:5	8/10/20 15:00 8/12/20 11:22 8/10/20 15:00 8/12/20 12:06 8/10/20 15:00 8/12/20 12:06 8/10/20 15:00 8/12/20 11:22 8/10/20 15:00 8/12/20 12:06 8/10/20 15:00 8/12/20 12:06 8/10/20 15:00 8/12/20 11:22 Analyst: RDA 8/10/20 13:30 8/11/20 14:20 Analyst: DLJ 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 8/7/20 12:54 8/10/20 12:41 Analyst: DLJ 8/7/20 14:00 8/11/20 16:31 Analyst: GAS 8/11/20 09:20 8/11/20 14:34 Analyst: JAG 8/14/20 11:06 8/14/20 11:30 Analyst: TJW	8/10/20 15:00 8/12/20 11:22 1.015 8/10/20 15:00 8/12/20 12:06 10.15 8/10/20 15:00 8/12/20 12:06 10.15 8/10/20 15:00 8/12/20 11:22 1.015 8/10/20 15:00 8/12/20 12:06 10.15 8/10/20 15:00 8/12/20 12:06 10.15 8/10/20 15:00 8/12/20 11:22 1.015 Analyst: RDA 8/10/20 13:30 8/11/20 14:20 10.15 Analyst: DLJ 8/7/20 12:54 8/10/20 12:41 1.015	8/10/20 15:00 8/12/20 12:06 10.15 94.7 8/10/20 15:00 8/12/20 12:06 10.15 94.7 8/10/20 15:00 8/12/20 12:06 10.15 12.6 8/10/20 15:00 8/12/20 11:22 1.015 0.273 8/10/20 15:00 8/12/20 12:06 10.15 83.0 8/10/20 15:00 8/12/20 11:22 1.015 13.8 Analyst: RDA 8/10/20 13:30 8/11/20 14:20 10.15 10.6 Analyst: DLJ Preparati 8/7/20 12:54 8/10/20 12:41 1.015 0.00115 8/7/20 12:54 8/10/20 12:41 1.015 0.00142 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected 8/7/20 12:54 8/10/20 12:41 1.015 0.235 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected 8/7/20 12:54 8/10/20 12:41 1.015 0.00298 8/7/20 12:54 8/10/20 12:41 1.015 0.00298 8/7/20 12:54 8/10/20 12:41 1.015 0.00298 8/7/20 12:54 8/10/20 12:41 1.015 0.000205 Analyst: DLJ 8/7/20 14:00 8/11/20 16:31 10.15 9.44 Analyst: GAS 8/11/20 09:20 8/11/20 14:34 1 Not Detected Analyst: JAG 8/14/20 11:06 8/14/20 11:30 1 NA Analyst: TJW	8/10/20 15:00 8/12/20 12:06 10.15 94.7 mg/L 8/10/20 15:00 8/12/20 12:06 10.15 94.7 mg/L 8/10/20 15:00 8/12/20 12:06 10.15 12.6 mg/L 8/10/20 15:00 8/12/20 11:22 1.015 0.273 mg/L 8/10/20 15:00 8/12/20 12:06 10.15 83.0 mg/L 8/10/20 15:00 8/12/20 11:22 1.015 13.8 mg/L 8/10/20 15:00 8/12/20 11:22 1.015 13.8 mg/L Analyst: RDA 8/10/20 13:30 8/11/20 14:20 10.15 10.6 mg/L Analyst: DLJ Preparation Method: El 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 8/7/20 12:54 8/10/20 12:41 1.015 0.00115 mg/L 8/7/20 12:54 8/10/20 12:41 1.015 0.00185 mg/L 8/7/20 12:54 8/10/20 12:41 1.015 0.00385 mg/L 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 mg/L 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 mg/L 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 8/7/20 12:54 8/10/20 12:41 1.015 0.235 mg/L 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 8/7/20 12:54 8/10/20 12:41 1.015 0.00298 mg/L	8/10/20 15:00 8/12/20 11:22 1.015 2.51 mg/L 0.03 8/10/20 15:00 8/12/20 12:06 10.15 94.7 mg/L 1.015 8/10/20 15:00 8/12/20 12:06 10.15 12.6 mg/L 0.203 8/10/20 15:00 8/12/20 11:22 1.015 0.273 mg/L 0.01 8/10/20 15:00 8/12/20 12:06 10.15 83.0 mg/L 1.015 8/10/20 15:00 8/12/20 11:22 1.015 13.8 mg/L 0.1 Analyst: RDA 8/10/20 13:30 8/11/20 14:20 10.15 13.8 mg/L 0.1 Analyst: DLJ	8/10/20 15:00 8/12/20 11:22 1.015 2.51 mg/L 0.03 0.1 8/10/20 15:00 8/12/20 12:06 10.15 94.7 mg/L 1.015 5.075 8/10/20 15:00 8/12/20 12:06 10.15 12.6 mg/L 0.203 0.5075 8/10/20 15:00 8/12/20 11:22 1.015 0.273 mg/L 0.01 0.02 8/10/20 15:00 8/12/20 11:22 1.015 0.273 mg/L 0.01 0.02 8/10/20 15:00 8/12/20 11:22 1.015 13.8 mg/L 0.1 0.5 Analyst: RDA 8/10/20 13:30 8/11/20 14:20 10.15 10.6 mg/L 0.203 0.5075 Analyst: DLJ Preparation Method: EPA 1638 8/7/20 12:54 8/10/20 12:41 1.015 0.00115 mg/L 0.0008 0.003 8/7/20 12:54 8/10/20 12:41 1.015 0.00115 mg/L 0.001 0.005 8/7/20 12:54 8/10/20 12:41 1.015 0.00115 mg/L 0.000 0.003 8/7/20 12:54 8/10/20 12:41 1.015 0.00142 mg/L 0.000 0.003 8/7/20 12:54 8/10/20 12:41 1.015 0.00142 mg/L 0.000 0.003 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 mg/L 0.0006 0.003 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 mg/L 0.0000 0.001 8/7/20 12:54 8/10/20 12:41 1.015 0.00157 mg/L 0.0002 0.01 8/7/20 12:54 8/10/20 12:41 1.015 0.235 mg/L 0.000 0.001 8/7/20 12:54 8/10/20 12:41 1.015 0.235 mg/L 0.002 0.01 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 0.002 0.005 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 0.002 0.005 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 12:41 1.015 Not Detected mg/L 0.002 0.01 8/7/20 12:54 8/10/20 12:41 1.015 0.0029 mg/L 0.002 0.001 8/7/20 12:54 8/10/20 12:41 1.015 0.0029 mg/L 0.002 0.001 8/7/20 12:54 8/10/20 12:41 1.015 0.00298 mg/L 0.0002 0.001 8/7/20 12:54 8/10/20 12:41 1.015 0.00298 mg/L 0.0002 0.001 8/7/20 12:54 8/10/20 12:41 1.015 0.000205 mg/L 0.0002 0.001 8/7/20 14:00 8/11/20 16:31 10.15 9.44 mg/L 0.01015 0.05075 8/11/20 10:08 8/11/20 11:30 1 NA mg/L 0.0003 0.0005

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4

Location Code:

WMWGORG 8/5/20 12:08

Collected: Customer ID:

Submittal Date:

8/6/20 11:01

Laboratory ID Number: BA14568									
Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Ana	lyst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:3	30	1	NA	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:3	30	1	NA	mg/L			
Analytical Method: SM4500Cl E	Ana	lyst: JCC							
* Chloride	8/10/20 13:48	8/10/20 13:4	18	8	41.0	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	Ana	lyst: JCC							
* Fluoride	8/11/20 12:41	8/11/20 12:4	11	1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	Ana	lyst: JCC							
* Sulfate	8/7/20 13:38	8/7/20 13:38	3	32	519	mg/L	16.00	32	
Analytical Method: Field Measurements	Ana	lyst: TJD							
Conductivity	8/5/20 12:05	8/5/20 12:05	5		1150.86	uS/cm			FA
рН	8/5/20 12:05	8/5/20 12:05	5		3.86	SU			FA
Temperature	8/5/20 12:05	8/5/20 12:05	5		21.53	С			FA
Turbidity	8/5/20 12:05	8/5/20 12:05	5		8.94	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 12:08

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BA14568

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	l Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14569 Manganese, Dissolved	mg/L	0.000120	0.0001474	0.10	5.36	5.25	0.0999	0.085 to 0.115	260	70 to 130	2.07	20
BA14570 Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14570 Boron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14570 Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Potassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14569 Iron, Dissolved	mg/L	-0.000578	0.0176	0.2	38.3	37.9	0.208	0.17 to 0.23	-50.0	70 to 130	1.05	20
BA14570 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 Sodium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20
BA14570 Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Barium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 Antimony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20
BA14570 Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iron, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Mercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20

Batch QC Summary



Customer Account: WMWGORG Sample Date:

8/5/20 12:08

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BA14568

			MB			Sample		Standard	R	ec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec Li	mit	Prec	<u>Li</u> mit
BA14570 Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0 80 t	o 120	0.00	20
BA14570 Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101 80 t	o 120	0.00	20
BA14566 Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14569 Alkalinity, Total as CaCO3	mg/L					43.8	49.0	45.0 to 55.0			2.26	10
BA14570 Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6 80 t	o 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4VLocation Code:WMWGORGCollected:8/5/20 13:05

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14569

Name	Prepared	Analyzed	Vio Spec [)F	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method: EF	PA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:	25 1.	015	4.41	mg/L	0.03	0.1	
* Calcium, Total	8/10/20 15:00	8/12/20 12:	09 20	0.3	167	mg/L	2.03	10.15	
* Iron, Total	8/10/20 15:00	8/12/20 12:	09 20	0.3	40.1	mg/L	0.406	1.015	
* Lithium, Total	8/10/20 15:00	8/12/20 11:	25 1.	015	0.322	mg/L	0.01	0.02	
* Magnesium, Total	8/10/20 15:00	8/12/20 12:	09 20	0.3	114	mg/L	2.03	10.15	
* Sodium, Total	8/10/20 15:00	8/12/20 11:	25 1.	015	29.1	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Anal	yst: RDA							
* Iron, Dissolved	8/10/20 13:30	8/11/20 14:	23 10	01.5	38.4	mg/L	2.03	5.075	RA
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method: EF	PA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	0.00116	mg/L	0.001	0.005	J
* Barium, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	0.0112	mg/L	0.002	0.01	
* Beryllium, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	0.00416	mg/L	0.0006	0.003	
* Cadmium, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	0.141	mg/L	0.002	0.005	
* Lead, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	8/7/20 12:54	8/10/20 12:	44 1.	015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	8/7/20 12:54	8/11/20 13:	20 1.	015	4.68	mg/L	0.3	2.5	
* Manganese, Total	8/7/20 12:54	8/17/20 14:	12 10).15	4.72	mg/L	0.01015	0.05075	
* Selenium, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 12:	44 1.	015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ							
* Manganese, Dissolved	8/7/20 14:00	8/11/20 16:	34 10	0.15	5.10	mg/L	0.01015	0.05075	RA
Analytical Method: EPA 245.1	Anal	yst: GAS							
Mercury, Total by CVAA	8/11/20 09:20	-	36 1		Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		yst: JAG				•			
Alkalinity, Total as CaCO3	8/14/20 11:06	-	30 1		44.8	mg/L		0.1	
Analytical Method: SM 2540C		lyst: TJW	·			-			
* Solids, Dissolved	8/10/20 12:25	•	50 1		1330	mg/L		83.3	

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

Certificate Of Analysis



Description: Gorgas Gypsum - MW-4V

Location Code: Collected:

WMWGORG 8/5/20 13:05

Customer ID:

Submittal Date:

8/6/20 11:01

Laboratory ID Number: BA14569					Subn	iittai Date:	8/6/20 11:0) 1	
Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	Ana	lyst: JAG							
Bicarbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:	30 1		44.8	mg/L			
Carbonate Alkalinity, (calc.)	8/14/20 11:06	8/14/20 11:	30 1	l	0.00	mg/L			
Analytical Method: SM4500Cl E	Ana	lyst: JCC							
* Chloride	8/10/20 13:49	8/10/20 13:	49 1	10	80.9	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	Ana	lyst: JCC							
* Fluoride	8/11/20 12:42	8/11/20 12:	42 1	l	0.363	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	Ana	lyst: JCC							
* Sulfate	8/7/20 13:39	8/7/20 13:3	9 4	10	761	mg/L	20.00	40	
Analytical Method: Field Measurements	Ana	lyst: TJD							
Conductivity	8/5/20 13:00	8/5/20 13:0	0		1386.95	uS/cm			FA
рН	8/5/20 13:00	8/5/20 13:0	0		5.81	SU			FA
Temperature	8/5/20 13:00	8/5/20 13:0	0		21.70	С			FA
Turbidity	8/5/20 13:00	8/5/20 13:0	0		9.04	NTU			FA

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 8/5/20 13:05

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BA14569

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570 Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570 Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570 Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570 Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14570 Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570 Iron, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570 Mercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20
BA14570 Boron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570 Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570 Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14570 Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570 Barium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570 Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570 Antimony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20
BA14570 Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570 Potassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570 Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14569 Iron, Dissolved	mg/L	-0.000578	0.0176	0.2	38.3	37.9	0.208	0.17 to 0.23	-50.0	70 to 130	1.05	20
BA14570 Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570 Sodium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570 Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20
BA14569 Manganese, Dissolved	mg/L	0.000120	0.0001474	0.10	5.36	5.25	0.0999	0.085 to 0.115	260	70 to 130	2.07	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date:

8/5/20 13:05

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BA14569

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	Limit
BA14570	Sulfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0 8	80 to 120	0.00	20
BA14566	Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14570	Chloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101 8	80 to 120	0.00	20
BA14569	Alkalinity, Total as CaCO3	mg/L					43.8	49.0	45.0 to 55.0			2.26	10
BA14570	Fluoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6 8	80 to 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum Field Blank-2Location Code:WMWGORGFBCollected:8/5/20 13:30

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14570

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	st: RDA		Preparati	ion Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:2	28 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 11:2	28 1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	8/10/20 15:00	8/12/20 11:2	28 1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	8/10/20 15:00	8/12/20 11:2	28 1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	8/10/20 15:00	8/12/20 11:2	28 1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	8/10/20 15:00	8/12/20 11:2	28 1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	Analy	st: DLJ		Preparati	ion Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	8/7/20 12:54	8/11/20 13:2	23 1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 12:4	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Analy	st: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 14:3	39 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Analy	st: TJW						
* Solids, Dissolved	8/10/20 12:25	8/14/20 09:5	50 1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	Analy	st: JCC						
* Chloride	8/10/20 13:44	8/10/20 13:4	14 1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	Analy	st: JCC						
* Fluoride	8/11/20 12:43		13 1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011		st: JCC			-			
* Sulfate	8/7/20 13:40	8/7/20 13:40) 1	Not Detected	ma/L	0.50	1	U

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

Batch QC Summary



Customer Account: WMWGORGFB **Sample Date:** 8/5/20 13:30

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BA14570

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570	Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.118	0.118	0.107	0.085 to 0.115	118	70 to 130	0.00	20
BA14570	Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.118	0.116	0.109	0.085 to 0.115	118	70 to 130	1.71	20
BA14570	Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.117	0.109	0.085 to 0.115	114	70 to 130	2.60	20
BA14570	Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.119	0.114	0.106	0.085 to 0.115	119	70 to 130	4.29	20
BA14570	Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0964	0.101	0.0957	0.085 to 0.115	96.4	70 to 130	4.66	20
BA14570	Iron, Total	mg/L	0.000169	0.0176	0.2	0.205	0.201	0.206	0.17 to 0.23	102	70 to 130	1.97	20
BA14570	Mercury, Total by CVAA	mg/L	0.0000240	0.0005	0.004	0.00365	0.00367	0.00374	0.0034 to 0.0046	91.2	70 to 130	0.546	20
BA14570	Boron, Total	mg/L	0.000611	0.0650254	1.00	0.977	0.974	0.989	0.85 to 1.15	97.7	70 to 130	0.308	20
BA14570	Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.12	5.02	5.15	4.25 to 5.75	102	70 to 130	1.97	20
BA14570	Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.121	0.121	0.114	0.085 to 0.115	121	70 to 130	0.00	20
BA14570	Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.121	0.120	0.113	0.085 to 0.115	121	70 to 130	0.830	20
BA14570	Potassium, Total	mg/L	0.0286	0.3674	10.0	10.6	10.7	11.3	8.5 to 11.5	106	70 to 130	0.939	20
BA14570	Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.17	5.12	5.22	4.25 to 5.75	103	70 to 130	0.972	20
BA14570	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.117	0.116	0.107	0.085 to 0.115	117	70 to 130	0.858	20
BA14570	Sodium, Total	mg/L	0.0149	0.044	5.00	4.96	4.86	4.94	4.25 to 5.75	99.2	70 to 130	2.04	20
BA14570	Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.126	0.122	0.112	0.085 to 0.115	126	70 to 130	3.23	20
BA14570	Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.120	0.121	0.115	0.085 to 0.115	120	70 to 130	0.830	20
BA14570	Barium, Total	mg/L	0.00000147	0.0002	0.10	0.109	0.105	0.101	0.085 to 0.115	109	70 to 130	3.74	20
BA14570	Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.196	0.193	0.195	0.17 to 0.23	98.0	70 to 130	1.54	20
BA14570	Antimony, Total	mg/L	0.000196	0.001	0.10	0.105	0.105	0.0966	0.085 to 0.115	105	70 to 130	0.00	20

Batch QC Summary



Customer Account: WMWGORGFB

Sample Date:

8/5/20 13:30

Customer ID:

Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BA14570

				MB			Sample		Standard		Rec		Prec
Sample Ar	nalysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14570 Flu	uoride	mg/L	0.0346	0.05	2.50	2.39	0.000748	2.47	2.25 to 2.75	95.6	80 to 120	0.00	20
BA14570 Su	ılfate	mg/L	-0.599	0.50	20.0	19.0	-0.361	18.3	18 to 22	95.0	80 to 120	0.00	20
BA14566 Sc	olids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14570 Ch	nloride	mg/L	0.028	0.50	10.0	10.1	0.0231	10.2	9 to 11	101	80 to 120	0.00	20

Certificate Of Analysis



Description: Gorgas Gypsum Equipment Blank-1Location Code:WMWGORGEBCollected:8/5/20 13:45

Customer ID:

Submittal Date: 8/6/20 11:01

Laboratory ID Number: BA14571

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Analy	st: RDA		Preparati	on Method:	EPA 1638		
* Boron, Total	8/10/20 15:00	8/12/20 11:43	3 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	8/10/20 15:00	8/12/20 11:43	3 1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	8/10/20 15:00	8/12/20 11:43	3 1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	8/10/20 15:00	8/12/20 11:43	3 1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	8/10/20 15:00	8/12/20 11:43	3 1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	8/10/20 15:00	8/12/20 11:43	3 1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	Analy	st: DLJ		Preparati	on Method:	EPA 1638		
* Antimony, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/7/20 12:54	8/11/20 13:39	9 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	8/7/20 12:54	8/11/20 13:39	9 1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/7/20 12:54	8/10/20 13:02	2 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	Analy	st: GAS						
* Mercury, Total by CVAA	8/11/20 09:20	8/11/20 14:5	5 1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	Analy	st: TJW						
* Solids, Dissolved	8/10/20 12:25	8/14/20 09:50	0 1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	Analy	st: JCC						
* Chloride	8/10/20 13:59	8/10/20 13:59	9 1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	Analy	st: JCC						
* Fluoride	8/11/20 12:55		5 1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	Analy	st: JCC						
* Sulfate	8/7/20 13:53	8/7/20 13:53	1	Not Detected	mg/L	0.50	1	U

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

Batch QC Summary



Customer Account: WMWGORGEB **Sample Date:** 8/5/20 13:45

Customer ID:

Delivery Date: 8/6/20 11:01

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BA14571

													_
				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14571	Manganese, Total	mg/L	0.000140	0.0001474	0.10	0.113	0.114	0.109	0.085 to 0.115	113	70 to 130	0.881	20
BA14571	Magnesium, Total	mg/L	0.00212	0.0462	5.00	5.13	5.08	5.22	4.25 to 5.75	103	70 to 130	0.979	20
BA14571	Iron, Total	mg/L	0.000169	0.0176	0.2	0.203	0.202	0.206	0.17 to 0.23	102	70 to 130	0.494	20
BA14571	Sodium, Total	mg/L	0.0149	0.044	5.00	4.81	4.77	4.94	4.25 to 5.75	96.2	70 to 130	0.835	20
BA14571	Arsenic, Total	mg/L	-0.0000203	0.0001474	0.10	0.118	0.118	0.115	0.085 to 0.115	118	70 to 130	0.00	20
BA14571	Boron, Total	mg/L	0.000611	0.0650254	1.00	0.980	0.964	0.989	0.85 to 1.15	98.0	70 to 130	1.65	20
BA14571	Lead, Total	mg/L	0.00000688	0.0001474	0.10	0.116	0.116	0.112	0.085 to 0.115	116	70 to 130	0.00	20
BA14571	Barium, Total	mg/L	0.00000147	0.0002	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.00	20
BA14571	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.113	0.109	0.107	0.085 to 0.115	113	70 to 130	3.60	20
BA14571	Chromium, Total	mg/L	-0.0000938	0.00044	0.10	0.116	0.116	0.114	0.085 to 0.115	116	70 to 130	0.00	20
BA14571	Lithium, Total	mg/L	-0.000227	0.0154	0.20	0.193	0.190	0.195	0.17 to 0.23	96.5	70 to 130	1.57	20
BA14571	Selenium, Total	mg/L	-0.0000834	0.001	0.10	0.114	0.112	0.109	0.085 to 0.115	114	70 to 130	1.77	20
BA14571	Calcium, Total	mg/L	-0.00124	0.1518	5.00	5.04	5.00	5.15	4.25 to 5.75	101	70 to 130	0.797	20
BA14571	Mercury, Total by CVAA	mg/L	0.0000278	0.0005	0.004	0.00383	0.00365	0.00361	0.0034 to 0.0046	95.8	70 to 130	4.81	20
BA14571	Molybdenum, Total	mg/L	0.00000625	0.0001474	0.10	0.113	0.111	0.107	0.085 to 0.115	113	70 to 130	1.79	20
BA14571	Antimony, Total	mg/L	0.000196	0.001	0.10	0.100	0.0990	0.0966	0.085 to 0.115	100	70 to 130	1.01	20
BA14571	Beryllium, Total	mg/L	-0.00000074	0.00088	0.10	0.0942	0.0966	0.0957	0.085 to 0.115	94.2	70 to 130	2.52	20
BA14571	Cobalt, Total	mg/L	-0.0000254	0.0001474	0.10	0.117	0.117	0.113	0.085 to 0.115	117	70 to 130	0.00	20
BA14571	Potassium, Total	mg/L	0.0286	0.3674	10.0	11.0	10.7	11.3	8.5 to 11.5	110	70 to 130	2.76	20
BA14571	Thallium, Total	mg/L	0.0000155	0.0001474	0.10	0.109	0.109	0.106	0.085 to 0.115	109	70 to 130	0.00	20

Batch QC Summary



Customer Account: WMWGORGEB

Sample Date:

8/5/20 13:45

Customer ID: Delivery Date:

8/6/20 11:01

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BA14571

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA14566	Solids, Dissolved	mg/L	2.00	25			3200	53.0	40 to 60			0.00	5
BA14571	Fluoride	mg/L	0.0328	0.05	2.50	2.45	0.0131	2.51	2.25 to 2.75	98.0	80 to 120	0.00	20
BA14571	Chloride	mg/L	0.0188	0.50	10.0	10.7	0.0826	10.2	9 to 11	107	80 to 120	0.00	20
BA14571	Sulfate	mg/L	-0.586	0.50	20.0	17.9	-0.529	18.3	18 to 22	89.5	80 to 120	0.00	20

U

Compound was analyzed, but not detected.



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

Alabama Pow	Chain d	of Cu	isto	dy	✓ Fi	eld C	om	plete		Outsi	de Lab					
Field	Ground					ab Co	mp	lete								
	APC Gener			abor			r				L	ab	ETA			
Reques	sted Complet	e Date	Routi	ine					1	Results To	Dustin Br	rook	ooks, Greg Dyer			
•	Site Represer				<u> </u>				1 I	Requested B	y Greg Dy	er				
	•	llector		ıs Ge	entry				1	-	Gorgas	Gy	Gypsum			
Bottles	1 Metals	500 1		$\overline{}$	Hg	25	50 m	. 1	 	5 Anions 250 mL			7 N/A		N/A	
Domes	2 Dissolved Me	_		\sqcup	TDS		00 m		6	Alkalinity	250 mL	41	B N/A		N/A	
		10001							لــّــا	7 incaminty	200 1112		- 110//1		111//	
	Comments															
						Bott	-16					Ī	ab			
	Sample #		Date		Time	Cou				Description	l		ilter	Lab :	ld	
E	B-2	_	03/202	20	10:15	4		Equip	me	nt Blank				BA145		
P	PZ-18 08/03/2020 11:00				11:00	6		Grour	ndw	ater			7	BA145	542	
P	PZ-19 08/03/2020 12:50					6		Grour	ndw	ater				BA145	343	
P	Z-20	08/	03/202	20	13:59	6		Grour	ndw	ater	-			BA145	544	
P	30,00,2020 10.00				13:59	6		Samp	le [Duplicate				BA145	45	
F	B-1	08/	03/202	20	14:45	4		Field	Bla	nk				BA145	46	
P	Z-21	08/	04/202	20	08:53	6		Grour	ndw	ater				BA145	547	
P	Z-22	08/04/2020 10:00			6		Groundwater						BA14548			
P	Z-17	08/	08/04/2020 11:20			6		Groundwater						BA145	349	
M	IW-3V	08/	04/202	20	13:01	6		Groundwater						BA145	550	
М	IW-3	08/	04/202	20	15:35	6		Groundwater						BA145	51	
М	IW-8V	08/	05/202	20	10:20	6		Grour	ndw	ater				BA145	52	
М	IW-8	08/	05/202	20	11:24	6		Grour	ndw	ater				BA145	53	
М	IW-12H	08/	05/202	20	12:50	6		Grour	ndw	ater				BA145	54	
М	IW-12V	08/	05/202	20	13:47	6		Grour	ndw	ater				BA145	555	
F	B-3	08/	05/202	20	14:10	4		Field	Bla	nk				BA145	56	
				\dashv									\Box			
	Reline	quished	d By							Received By	7			Date	e/Tim	ie
	fa	Us Taty	: •							Laur Melly				08/06/2	2020 0	8:09
												-				
													<u>L</u>			
Sn	narTroll ID	7586-4 ⁻¹	1446-5	5-5				Д11	m	etals and rad	iological	hot	tles k	nave nH	< 2 L	 Л
	-					\dashv		1111		Cooler Temp						
Turbidity ID 7081-38476-1-1 Sample Event 1289					П		mometer ID				acgices (
					11		pH Strip ID									
										1 F 12						

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Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

Chain of Custody Field Comp	lete Outside Lab
Groundwater APC General Testing Laboratory Lab Comple	ete

APC General Testing Laboratory Lab ETA 08/06/202								20 10:00		
Reque	ested Complete I	Date Routine				Results To	Dustin Br	ooks, Gre	g Dyer	
•	Site Representa	ative John Pat	e			Requested By	Greg Dy	er		
	Colle	ctor TJ Daug	herty			Location	Gorgas	Gypsun	n	
Bottles	1 Metals	500 mL 3	Hg	250 n	nL [5 Anions	250 mL	7 N/A		N/A
20000	2 Diss Metals	500 mL 4	TDS	500 n	nL	6 Alkalinity	250 mL	8 N/A		N/A
	Commonto			2110/5/20						
	Comments Co	rrecting bottle cou	nt for MW-4. L	BM 8/6/20						
				Bottle				Lab		
	Sample #	Date	Time	Count		Description		Filter	Lab Id	
	MW-1L	08/03/2020	11:45	6	Groun	dwater	•	TITCI	BA1455	7
⊢	MW-1L Dup	08/03/2020	11:45	6	<u> </u>	e Duplicate			BA1455	
-	MW-2L	08/03/2020	12:55	6		dwater		BA14559		
-	MW-3L	08/03/2020	14:28	6	-	dwater			BA14560	
ŀ	MW-11H	08/04/2020	09:35	6	-	dwater		BA1456		
ľ	ИW-11H Dup	08/04/2020	09:35	6	Sampl	e Duplicate			BA14562	2
-	ИW-13H	08/04/2020	11:10	6	 	dwater		BA14563	3	
Ī	MW-9H	08/04/2020	12:20	6	Groun	dwater		BA14564	1	
r	MW-9V	08/04/2020	15:30	6	Groun	dwater		BA14565	5	
Ī	MW-4L	08/05/2020	09:55	6	Groun		BA14566	5		
ı	ИW-14H	08/05/2020	11:10	6	Groun	dwater			BA14567	7
r	MW-4	08/05/2020	12:08	6	Groun	dwater			BA14568	3
Ī	MW-4V	08/05/2020	13:05	6	Groun	dwater			BA14569)
F	-B-2	08/05/2020	13:30	4	Field E	Blank			BA14570)
F	EB-1	08/05/2020	13:45	4	Equipr	nent Blank			BA1457	
L										
	Relinau	ished By				Received By	7		Date/	Time
	1 Ada	<u> </u>				Anathy			08/06/202	
	7	• •				· m				

SmarTroll ID | 7586-41445-5-4 Turbidity ID | 4677-23342-4-1 Sample Event | 1289

All metals and radiological bottles have pH < 2 🔽

Cooler Temp | 0.1 degrees C Thermometer ID 5408-27568-2-2 pH Strip ID 8129-45506-2-1

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Pov	Chain of	vater	La	eld Com	_		Outsi	de Lab L	.al	b ET	ГА			
Regues	sted Complete	Date Boutine	-			Т	Results To	Ductin Br	_	aks C	Greg Dyer			
reques	Site Representa					\dashv	Requested By				neg Dyei			
						┨	1 ,							
	Colle	ector Dallas (Jentry			ᆜ	Location	1 Gorgas		ayps	um			
Bottles	1 Radium	1 L 3	N/A	N/A		5	N/A	N/A		7 1	N/A	N/A		
	2 N/A	N/A 4	N/A	N/A		6	N/A	N/A		8 1	N/A	N/A		
	Comments	adium MS/MSD co	ollected at PZ	-19					_ _					
				Bottle						Lab)			
	Sample #	Date	Time	Count			Description]	Filte	er Lab l	d		
E	B-2	08/03/2020	10:15	1	Equip	ome	ent Blank		L		BA145	572		
Р	² Z-18	08/03/2020	11:00	1	Grou	ndv	vater		L		BA145	73		
Р	Z-19	08/03/2020	12:50	3	Grou	ndv	vater				BA145	74		
Р	Z-20	08/03/2020	13:59	1	Grou	ndv	vater				BA145	75		
PZ-20 dup 08/03/2020 13:59 1 Sample Du							Duplicate				BA145	76		
F	B-1	08/03/2020	03/2020 14:45 1 Field Blank								BA145	77		
Р	Z-21	08/04/2020	08:53	1	Grou	ndv	vater	_	L		BA145	78		
Р	Z-22	08/04/2020	10:00	1	Grou	ndwater					BA145	79		
Р	Z-17	08/04/2020	11:20	1	Grou	undwater					BA145	80		
N	1W-3V	08/04/2020	13:01	1	Grou	ndv	vater	-	I		BA145	BA14581		
Ν	1W-3	08/04/2020	15:35	1	Grou	ndv	vater				BA145	82		
N	1W-8V	08/05/2020	10:20	1	Grou	ndv	vater				BA145	83		
N	1W-8	08/05/2020	11:24	1	Grou	ndv	vater				BA145	84		
Ν	1W-12H	08/05/2020	12:50	1	Grou	ndv	vater				BA145	85		
N	1W-12V	08/05/2020	13:47	1	Grou	ndv	vater		I		BA145	86		
F	B-3	08/05/2020	14:10	1	Field	Bla	ınk		Γ		BA145	87		
									Γ					
									Г					
									Γ					
									Γ					
	D 1:	· 1 1 D					n · 1n		_		D 4	/1731		
		ished By		1			Received By		_			e/Tim		
Polles Dety							Laura Mily				08/06/2	020 0	8:08	
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<u> </u>									_					
Sn	narTroll ID 75	86-41446-5-5		7	A 11	m	etals and rad	iological l	bα	- - ottle	s have pH	 ر 2 آر	 7	

 SmarTroll ID
 7586-41446-5-5

 Turbidity ID
 7081-38476-1-1

 Sample Event
 1289

All metals and radiological bottles have pH < 2 Cooler Temp N/A

Thermometer ID N/A

pH Strip ID 8129-45506-2-1

Bottles/Pre-Preserved Bottles are provided by the GTL

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📤 Alabama Power	
≥ ab&	Chain of Custody
Field	Chain of Custody Groundwater
	APC General Testing Labors

Field Complete

/	Outside	Lab
	1	

Lab Complete

APC General Testing Laboratory									L	ab I	ET	A 08/06/20)20 10):00	
Requested Complete Date Routine						Results To	Dustin Bro	Dustin Brooks, Greg Dyer							
Site Representative Jo				John Pate]]	Requested By	Greg Dye	Greg Dyer				
Collector TJ Daugherty						Location	Gorgas Gypsum								
Bottles	1 Radium	1 L		3	N/A	N/A		5	N/A	N/A	7	N	/A	N/A	
	2 N/A	N/A		4	N/A	N/A		6	N/A	N/A	8	N.	/A	N/A	
	Comments	Radium I	MS/MSD o	col	lected at MV	V-4L									
	Sample #		Date		Time	Bottle Count			Description			ab ltei	r Lab Io	d	
Ī	MW-1L	08/	03/2020		11:45	1	Groun	dw	1				BA145	88	
				一			1_								

			Bottle		Lab	
Sample #	Date	Time	Count	Description	Filter	Lab Id
MW-1L	08/03/2020	11:45	1	Groundwater		BA14588
MW-1L Dup	08/03/2020	11:45	1	Sample Duplicate		BA14589
MW-2L	08/03/2020	12:55	1	1 Groundwater		BA14590
MW-3L	08/03/2020	14:28	1	Groundwater		BA14591
MW-11H	08/04/2020	09:35	1	Groundwater		BA14592
MW-11H Dup	08/04/2020	09:35	1	Sample Duplicate		BA14593
MW-13H	08/04/2020	11:10	1	Groundwater		BA14594
MW-9H	08/04/2020	12:20	1	Groundwater		BA14595
MW-9V	08/04/2020	15:30	1	Groundwater		BA14596
MW-4L	08/05/2020	09:55	3	Groundwater		BA14597
MW-14H	08/05/2020	11:10	1	Groundwater		BA14598
MW-4	08/05/2020	12:08	1	Groundwater		BA14599
MW-4V	08/05/2020	13:05	1	Groundwater		BA14600
FB-2	08/05/2020	13:30	1	Field Blank		BA14601
EB-1	08/05/2020	13:45	1	Equipment Blank		BA14602

Received By	Date/Time
Anathy	08/06/2020 09:35
	· · · · · · · · · · · · · · · · · · ·

SmarTroll ID | 7586-41445-5-4 Turbidity ID | 4677-23342-4-1 Sample Event | 1289

Cooler Temp N/A Thermometer ID N/A pH Strip ID 8129-45506-2-1

Bottles/Pre-Preserved Bottles are provided by the GTL



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 400-191957-1

Laboratory Sample Delivery Group: Gorgas Gypsum 1289

Client Project/Site: CCR Plant Gorgas

For:

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

Attn: Laura Midkiff

Cheyrodewhitmin

Authorized for release by: 9/28/2020 4:29:53 PM

Cheyenne Whitmire, Project Manager II (850)471-6222

Cheyenne.Whitmire@Eurofinset.com

·····LINKS ······

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Job ID: 400-191957-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative 400-191957-1

RAD

Method 9315: Radium-226 prep batch 160-479478. 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. BA14572 EB-2 (400-191957-1), BA14573 PZ-18 (400-191957-2), BA14574 PZ-19 (400-191957-3), BA14574 PZ-19 (400-191957-3[MSI), BA14574 PZ-19 (400-191957-3[MSDI), BA14575 PZ-20 (400-191957-4), BA14576 PZ-20 DUP (400-191957-5), BA14577 FB-1 (400-191957-6), BA14578 PZ-21 (400-191957-7), BA14579 PZ-22 (400-191957-8), BA14580 PZ-17 (400-191957-9), BA14581 MW-3V (400-191957-10), BA14582 MW-3 (400-191957-11), BA14583 MW-8V (400-191957-12), (LCS 160-479478/1-A) and (MB 160-479478/23-A)

Method 9315: Radium-226 prep batch 160-482544. 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. BA14584 MW-8 (400-191957-13), BA14585 MW-12H (400-191957-14), BA14586 MW-12V (400-191957-15), BA14587 FB-3 (400-191957-16), BA14588 MW-1L (400-191957-17), BA14589 MW-1L DUP (400-191957-18), BA14590 MW-2L (400-191957-19), BA14591 MW-3L (400-191957-20), BA14592 MW-11H (400-191957-21), BA14593 MW-11H DUP (400-191957-22), BA14594 MW-13H (400-191957-23), BA14595 MW-9H (400-191957-24), BA14596 MW-9V (400-191957-25), BA14597 MW-4L (400-191957-26), BA14597 MW-4L (400-191957-26[MS]), BA14597 MW-4L (400-191957-26IMSDI), BA14598 MW-14H (400-191957-27), BA14599 MW-4 (400-191957-28), BA14600 MW-4V (400-191957-29). BA14601 FB-2 (400-191957-30), BA14602 EB-1 (400-191957-31), (LCS 160-482544/1-A) and (MB 160-482544/23-A)

Method 9320: Radium-228 prep batch 160-479482. 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. BA14572 EB-2 (400-191957-1), BA14573 PZ-18 (400-191957-2), BA14574 PZ-19 (400-191957-3), BA14574 PZ-19 (400-191957-3[MS]), BA14574 PZ-19 (400-191957-3[MSD]), BA14575 PZ-20 (400-191957-4), BA14576 PZ-20 DUP (400-191957-5), BA14577 FB-1 (400-191957-6), BA14578 PZ-21 (400-191957-7), BA14579 PZ-22 (400-191957-8), BA14580 PZ-17 (400-191957-9), BA14581 MW-3V (400-191957-10), BA14582 MW-3 (400-191957-11), BA14583 MW-8V (400-191957-12), (LCS 160-479482/1-A) and (MB 160-479482/23-A)

Method 9320: Radium-228 prep batch 160-481587. The following samples did not meet the requested limit (RL) due to the reduced sample volume. There was insufficient volume remaining due to re-analysis. The data have been reported with this narrative. BA14584 MW-8 (400-191957-13), BA14585 MW-12H (400-191957-14), BA14586 MW-12V (400-191957-15), BA14587 FB-3 (400-191957-16), BA14588 MW-1L (400-191957-17), BA14589 MW-1L DUP (400-191957-18), BA14590 MW-2L (400-191957-19), BA14591 MW-3L (400-191957-20), BA14592 MW-11H (400-191957-21), BA14593 MW-11H DUP (400-191957-22), BA14594 MW-13H (400-191957-23), BA14595 MW-9H (400-191957-24), BA14596 MW-9V (400-191957-25), BA14597 MW-4L (400-191957-26), BA14597 MW-4L (400-191957-26[MS]), BA14597 MW-4L (400-191957-26[MSD]), BA14598 MW-14H (400-191957-27), BA14599 MW-4 (400-191957-28), BA14600 MW-4V (400-191957-29), BA14601 FB-2 (400-191957-30), BA14602 EB-1 (400-191957-31), (LCS 160-481587/1-A) and (MB 160-481587/23-A)

Method 9320: Radium-228 prep batch 160-481587. 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. BA14584 MW-8 (400-191957-13), BA14585 MW-12H (400-191957-14), BA14586 MW-12V (400-191957-15), BA14587 FB-3 (400-191957-16), BA14588 MW-1L (400-191957-17), BA14589 MW-1L DUP (400-191957-18), BA14590 MW-2L (400-191957-19), BA14591 MW-3L (400-191957-20), BA14592 MW-11H (400-191957-21), BA14593 MW-11H DUP (400-191957-22), BA14594 MW-13H (400-191957-23), BA14595 MW-9H (400-191957-24), BA14596 MW-9V (400-191957-25), BA14597 MW-4L (400-191957-26), BA14597 MW-4L (400-191957-26[MS]), BA14597 MW-4L (400-191957-26IMSDI), BA14598 MW-14H (400-191957-27), BA14599 MW-4 (400-191957-28), BA14600 MW-4V (400-191957-29). BA14601 FB-2 (400-191957-30), BA14602 EB-1 (400-191957-31), (LCS 160-481587/1-A) and (MB 160-481587/23-A)

Method PrecSep 0: Radium 228 Prep Batch 160-479482. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA14572 EB-2 (400-191957-1), BA14573 PZ-18 (400-191957-2), BA14574 PZ-19 (400-191957-3), BA14574 PZ-19 (400-191957-3[MS]), BA14574 PZ-19 (400-191957-3[MSD]), BA14575 PZ-20 (400-191957-4), BA14576 PZ-20 DUP (400-191957-5), BA14577 FB-1 (400-191957-6), BA14578 PZ-21 (400-191957-7), BA14579 PZ-22 (400-191957-8), BA14580 PZ-17 (400-191957-9), BA14581 MW-3V (400-191957-10), BA14582 MW-3 (400-191957-11) and BA14583 MW-8V (400-191957-12).

3

Case Narrative

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Job ID: 400-191957-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method PrecSep 0: Radium 228 Prep Batch 160-479486. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA14584 MW-8 (400-191957-13), BA14585 MW-12H (400-191957-14), BA14586 MW-12V (400-191957-15), BA14587 FB-3 (400-191957-16), BA14588 MW-1L (400-191957-17), BA14589 MW-1L DUP (400-191957-18), BA14590 MW-2L (400-191957-19), BA14591 MW-3L (400-191957-20), BA14592 MW-11H (400-191957-21), BA14593 MW-11H DUP (400-191957-22), BA14594 MW-13H (400-191957-23), BA14595 MW-9H (400-191957-24), BA14596 MW-9V (400-191957-25), BA14597 MW-4L (400-191957-26), BA14597 MW-4L (400-191957-26[MS]), BA14597 MW-4L (400-191957-26[MSD]), BA14598 MW-14H (400-191957-27), BA14599 MW-4 (400-191957-28), BA14600 MW-4V (400-191957-29), BA14601 FB-2 (400-191957-30) and BA14602 EB-1 (400-191957-31).

Method PrecSep 0: Radium 228 Prep Batch 160-481587. The following samples were prepared at a reduced aliquot due to insufficient volume remaining due to re-analysis. BA14584 MW-8 (400-191957-13), BA14585 MW-12H (400-191957-14), BA14586 MW-12V (400-191957-15), BA14587 FB-3 (400-191957-16), BA14588 MW-1L (400-191957-17), BA14589 MW-1L DUP (400-191957-18), BA14590 MW-2L (400-191957-19), BA14591 MW-3L (400-191957-20), BA14592 MW-11H (400-191957-21), BA14593 MW-11H DUP (400-191957-22), BA14594 MW-13H (400-191957-23), BA14595 MW-9H (400-191957-24), BA14596 MW-9V (400-191957-25), BA14597 MW-4L (400-191957-26), BA14597 MW-4L (400-191957-26[MS]), BA14597 MW-4L (400-191957-26[MSD]), BA14598 MW-14H (400-191957-27), BA14599 MW-4 (400-191957-28), BA14600 MW-4V (400-191957-29), BA14601 FB-2 (400-191957-30) and BA14602 EB-1 (400-191957-31)

Method PrecSep-21: Radium 226 Prep Batch 160-479478. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA14572 EB-2 (400-191957-1), BA14573 PZ-18 (400-191957-2), BA14574 PZ-19 (400-191957-3), BA14574 PZ-19 (400-191957-3[MS]), BA14574 PZ-19 (400-191957-3[MSD]), BA14575 PZ-20 (400-191957-4), BA14576 PZ-20 DUP (400-191957-5), BA14577 FB-1 (400-191957-6), BA14578 PZ-21 (400-191957-7), BA14579 PZ-22 (400-191957-8), BA14580 PZ-17 (400-191957-9), BA14581 MW-3V (400-191957-10), BA14582 MW-3 (400-191957-11) and BA14583 MW-8V (400-191957-12).

Method PrecSep-21: Radium 226 Prep Batch 160-479484. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA14584 MW-8 (400-191957-13), BA14585 MW-12H (400-191957-14), BA14586 MW-12V (400-191957-15), BA14587 FB-3 (400-191957-16), BA14588 MW-1L (400-191957-17), BA14589 MW-1L DUP (400-191957-18), BA14590 MW-2L (400-191957-19), BA14591 MW-3L (400-191957-20), BA14592 MW-11H (400-191957-21), BA14593 MW-11H DUP (400-191957-22), BA14594 MW-13H (400-191957-23), BA14595 MW-9H (400-191957-24), BA14596 MW-9V (400-191957-25), BA14597 MW-4L (400-191957-26), BA14597 MW-4L (400-191957-26[MS]), BA14597 MW-4L (400-191957-26[MSD]), BA14598 MW-14H (400-191957-27), BA14599 MW-4 (400-191957-28), BA14600 MW-4V (400-191957-29), BA14601 FB-2 (400-191957-30) and BA14602 EB-1 (400-191957-31).

Method PrecSep-21: Radium-226 Prep Batch 160-482544. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA14584 MW-8 (400-191957-13), BA14585 MW-12H (400-191957-14), BA14586 MW-12V (400-191957-15), BA14587 FB-3 (400-191957-16), BA14588 MW-1L (400-191957-17), BA14589 MW-1L DUP (400-191957-18), BA14590 MW-2L (400-191957-19), BA14591 MW-3L (400-191957-20), BA14592 MW-11H (400-191957-21), BA14593 MW-11H DUP (400-191957-22), BA14594 MW-13H (400-191957-23), BA14595 MW-9H (400-191957-24), BA14596 MW-9V (400-191957-25), BA14597 MW-4L (400-191957-26), BA14597 MW-4L (400-191957-26[MS]), BA14597 MW-4L (400-191957-26[MSD]), BA14598 MW-14H (400-191957-27), BA14599 MW-4 (400-191957-28), BA14600 MW-4V (400-191957-29), BA14601 FB-2 (400-191957-30) and BA14602 EB-1 (400-191957-31).

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Method Summary

Client: Alabama Power General Test Laboratory

Project/Site: CCR Plant Gorgas

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

Job ID: 400-191957-1

SDG: Gorgas Gypsum 1289

Sample Summary

Client: Alabama Power General Test Laboratory

Project/Site: CCR Plant Gorgas

Job ID: 400-191957-1 SDG: Gorgas Gypsum 1289

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-191957-1	BA14572 EB-2	Water	08/03/20 10:15	08/10/20 14:30	
400-191957-2	BA14573 PZ-18	Water	08/03/20 11:00	08/10/20 14:30	
400-191957-3	BA14574 PZ-19	Water	08/03/20 12:50	08/10/20 14:30	
400-191957-4	BA14575 PZ-20	Water	08/03/20 13:59	08/10/20 14:30	
400-191957-5	BA14576 PZ-20 DUP	Water	08/03/20 13:59	08/10/20 14:30	
400-191957-6	BA14577 FB-1	Water	08/03/20 14:45	08/10/20 14:30	
400-191957-7	BA14578 PZ-21	Water	08/04/20 08:53	08/10/20 14:30	
400-191957-8	BA14579 PZ-22	Water	08/04/20 10:00	08/10/20 14:30	
400-191957-9	BA14580 PZ-17	Water	08/04/20 11:20	08/10/20 14:30	
400-191957-10	BA14581 MW-3V	Water	08/04/20 13:01	08/10/20 14:30	
400-191957-11	BA14582 MW-3	Water	08/04/20 15:35	08/10/20 14:30	
400-191957-12	BA14583 MW-8V	Water	08/05/20 10:20	08/10/20 14:30	
400-191957-13	BA14584 MW-8	Water	08/05/20 11:24	08/10/20 14:30	
400-191957-14	BA14585 MW-12H	Water	08/05/20 12:50	08/10/20 14:30	
400-191957-15	BA14586 MW-12V	Water	08/05/20 13:47	08/10/20 14:30	
400-191957-16	BA14587 FB-3	Water	08/05/20 14:10	08/10/20 14:30	
400-191957-17	BA14588 MW-1L	Water	08/03/20 11:45	08/10/20 14:30	
400-191957-18	BA14589 MW-1L DUP	Water	08/03/20 11:45	08/10/20 14:30	
400-191957-19	BA14590 MW-2L	Water	08/03/20 12:55	08/10/20 14:30	
400-191957-20	BA14591 MW-3L	Water	08/03/20 14:28	08/10/20 14:30	
400-191957-21	BA14592 MW-11H	Water	08/04/20 09:35	08/10/20 14:30	
400-191957-22	BA14593 MW-11H DUP	Water	08/04/20 09:35	08/10/20 14:30	
400-191957-23	BA14594 MW-13H	Water	08/04/20 11:10	08/10/20 14:30	
400-191957-24	BA14595 MW-9H	Water	08/04/20 12:20	08/10/20 14:30	
400-191957-25	BA14596 MW-9V	Water	08/04/20 15:30	08/10/20 14:30	
400-191957-26	BA14597 MW-4L	Water	08/05/20 09:55	08/10/20 14:30	
400-191957-27	BA14598 MW-14H	Water	08/05/20 11:10	08/10/20 14:30	
400-191957-28	BA14599 MW-4	Water	08/05/20 12:08	08/10/20 14:30	
400-191957-29	BA14600 MW-4V	Water	08/05/20 13:05	08/10/20 14:30	
400-191957-30	BA14601 FB-2	Water	08/05/20 13:30	08/10/20 14:30	
400-191957-31	BA14602 EB-1	Water	08/05/20 13:45	08/10/20 14:30	

Eurofins TestAmerica, Pensacola

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14572 EB-2

Lab Sample ID: 400-191957-1 Date Collected: 08/03/20 10:15 **Matrix: Water** Date Received: 08/10/20 14:30

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0510		0.0890	0.0891	1.00	0.158				1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		40 - 110					08/13/20 15:23	09/06/20 12:29	1

Method: 9320 - I	Radium-228 ((GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.477	U	0.392	0.395	1.00	0.624	pCi/L	08/13/20 16:06	09/01/20 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		40 - 110					08/13/20 16:06	09/01/20 11:56	1
Y Carrier	81.1		40 - 110					08/13/20 16:06	09/01/20 11:56	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.528	U	0.402	0.405	5.00	0.624	pCi/L		09/28/20 11:10	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14573 PZ-18

Date Collected: 08/03/20 11:00 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-2

Matrix: Water

adium-226 (GFPC)								
	,	Count Uncert.	Total Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.0663	U	0.0946	0.0948	1.00	0.161	pCi/L	08/13/20 15:23	09/06/20 12:30	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
91.8		40 - 110					08/13/20 15:23	09/06/20 12:30	1
	Result 0.0663 %Yield	Result Qualifier 0.0663 U WYield Qualifier 91.8	Count Uncert.	Count Uncert. Uncert.	Count Total Uncert. Uncert. Uncert. Uncert. Uncert. O.0663 U O.0946 O.0948 O.	Count Total Uncert. Uncert.	Count Total Uncert. Uncert. Uncert. Uncert. Uncert. O.0663 U O.0946 O.0948 O.0948 O.0161 O.	Count Uncert. Uncert. Uncert. Variety V	Count Uncert. Uncert. Uncert. Variety V

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.444	U	0.377	0.380	1.00	0.603	pCi/L	08/13/20 16:06	09/01/20 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					08/13/20 16:06	09/01/20 11:56	1
Y Carrier	78.9		40 - 110					08/13/20 16:06	09/01/20 11:56	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.511	U	0.389	0.392	5.00	0.603	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14574 PZ-19

Lab Sample ID: 400-191957-3 Date Collected: 08/03/20 12:50 **Matrix: Water** Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.109	U	0.106	0.107	1.00	0.163	pCi/L	08/13/20 15:23	09/06/20 15:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.8		40 - 110					08/13/20 15:23	09/06/20 15:30	1

Method: 9320 - I	Radium-228 (GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.543	U	0.453	0.456	1.00	0.717	pCi/L	08/13/20 16:06	09/01/20 11:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.8		40 - 110					08/13/20 16:06	09/01/20 11:56	1
Y Carrier	68.8		40 - 110					08/13/20 16:06	09/01/20 11:56	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.652	U	0.465	0.468	5.00	0.717	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14575 PZ-20

Lab Sample ID: 400-191957-4 Date Collected: 08/03/20 13:59 **Matrix: Water** Date Received: 08/10/20 14:30

Method: 9315 - Rad	dium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0788	U	0.0925	0.0928	1.00	0.149	pCi/L	08/13/20 15:23	09/06/20 15:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.4		40 - 110					08/13/20 15:23	09/06/20 15:32	1

Method: 9320 -	, taaram 220 ((3.1.0)	Count Uncert.	Total Uncert.						
Analyte	Posult	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				`						Diriac
Radium-228	0.0105	U	0.358	0.358	1.00	0.639	pCi/L	08/13/20 16:06	09/01/20 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.4		40 - 110					08/13/20 16:06	09/01/20 11:59	1
Y Carrier	85.6		40 - 110					08/13/20 16:06	09/01/20 11:59	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
Analyte	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.0893		0.370	0.370	5.00	0.639			09/28/20 11:11	1
+ 228	0.0000	Ü	0.070	0.070	0.00	0.000	PO"L		00/20/20 11.11	'

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14576 PZ-20 DUP

Lab Sample ID: 400-191957-5 Date Collected: 08/03/20 13:59 **Matrix: Water** Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.101	0.101	1.00	0.154	pCi/L	08/13/20 15:23	09/06/20 15:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					08/13/20 15:23	09/06/20 15:32	1
-										
Method: 9320 -	Radium-228 ((GFPC)								
Method: 9320 -	Radium-228 ((GFPC)	Count	Total						
Method: 9320 -	Radium-228((GFPC)	Count Uncert.	Total Uncert.						

Radium-228	0.0565	U	0.489	0.489	1.00	0.865	pCi/L	08/13/20 16:06	09/01/20 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					08/13/20 16:06	09/01/20 11:59	1
Y Carrier	68.0		40 - 110					08/13/20 16:06	09/01/20 11:59	1

Method: Ra226_Ra2	228 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.158	U	0.499	0.499	5.00	0.865	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14577 FB-1

Lab Sample ID: 400-191957-6 Date Collected: 08/03/20 14:45 **Matrix: Water** Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0121	U	0.0637	0.0637	1.00	0.153	pCi/L	08/13/20 15:23	09/06/20 15:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					08/13/20 15:23	09/06/20 15:33	1

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0590	U	0.408	0.408	1.00	0.739	pCi/L	08/13/20 16:06	09/01/20 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					08/13/20 16:06	09/01/20 11:59	1
Y Carrier	80.7		40 - 110					08/13/20 16:06	09/01/20 11:59	1

Method: Ra226_Ra2	228 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0711	U	0.413	0.413	5.00	0.739	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14578 PZ-21

Lab Sample ID: 400-191957-7 Date Collected: 08/04/20 08:53 **Matrix: Water** Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.321		0.144	0.147	1.00	0.142	pCi/L	08/13/20 15:23	09/06/20 15:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.2		40 - 110					08/13/20 15:23	09/06/20 15:33	

Method: 9320 - I	Radium-228 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.518	U	0.424	0.427	1.00	0.675	pCi/L	08/13/20 16:06	09/01/20 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.2		40 - 110					08/13/20 16:06	09/01/20 11:59	1
Y Carrier	83.7		40 - 110					08/13/20 16:06	09/01/20 11:59	1

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radium	1-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.839		0.448	0.452	5.00	0.675	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14579 PZ-22

Lab Sample ID: 400-191957-8 Date Collected: 08/04/20 10:00 **Matrix: Water** Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.204		0.119	0.121	1.00	0.146	pCi/L	08/13/20 15:23	09/06/20 15:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		40 - 110					08/13/20 15:23	09/06/20 15:33	1

Method: 9320 -	Radium-228 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0907	U	0.333	0.333	1.00	0.615	pCi/L	08/13/20 16:06	09/01/20 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		40 - 110					08/13/20 16:06	09/01/20 11:59	1
Y Carrier	81.1		40 - 110					08/13/20 16:06	09/01/20 11:59	1

Method: Ra226_Ra2	228 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
Amalusta	Danult	O., -1:6:	Uncert.	Uncert.	D.	MDC	11	D	A a lo a d	Dil Faa
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.114	U	0.354	0.354	5.00	0.615	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14580 PZ-17

Date Collected: 08/04/20 11:20 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-9

Matrix: Water

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0512	U	0.104	0.105	1.00	0.189	pCi/L	08/13/20 15:23	09/06/20 15:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.9		40 - 110					08/13/20 15:23	09/06/20 15:34	1

	Radium-228 (,	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.356	U	0.398	0.399	1.00	0.653	pCi/L	08/13/20 16:06	09/01/20 11:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.9		40 - 110					08/13/20 16:06	09/01/20 11:59	1
Y Carrier	82.6		40 - 110					08/13/20 16:06	09/01/20 11:59	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.407	U	0.411	0.413	5.00	0.653	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14581 MW-3V

Date Collected: 08/04/20 13:01 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-10

Matrix: Water

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0648	U	0.0944	0.0946	1.00	0.161	pCi/L	08/13/20 15:23	09/06/20 15:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		40 - 110					08/13/20 15:23	09/06/20 15:34	1

Method: 9320 - I	Radium-228 (GFPC)								
A	D16	O. all flam	Count Uncert.	Total Uncert.	Di .	MDO	11-24	D anis and	Avelowed	DU E.
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0715	U	0.343	0.343	1.00	0.630	pCi/L	08/13/20 16:06	09/01/20 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		40 - 110					08/13/20 16:06	09/01/20 12:00	1
Y Carrier	81.1		40 - 110					08/13/20 16:06	09/01/20 12:00	1

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.00668	U	0.356	0.356	5.00	0.630	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14582 MW-3

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: 400-191957-11 Date Collected: 08/04/20 15:35

Matrix: Water Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0190	U	0.0821	0.0821	1.00	0.161	pCi/L	08/13/20 15:23	09/06/20 15:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					08/13/20 15:23	09/06/20 15:34	1
Method: 9320 -	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyto	Pocult	Qualifier	(2441)	(201)	DI	MDC	Linit	Dropared	Analyzod	Dil Eac

Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.431	U	0.308	0.310	1.00	0.477	pCi/L	08/13/20 16:06	09/01/20 12:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					08/13/20 16:06	09/01/20 12:00	1
Y Carrier	88.6		40 - 110					08/13/20 16:06	09/01/20 12:00	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.450	U	0.319	0.321	5.00	0.477	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14583 MW-8V

Lab Sample ID: 400-191957-12 Date Collected: 08/05/20 10:20 **Matrix: Water**

Date Received: 08/10/20 14:30

Method: 9315 - I	Radium-226 ((GIFC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.340		0.159	0.162	1.00	0.174	pCi/L	08/13/20 15:23	09/06/20 17:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
D- O- mile	70.4		10 110					00/40/00 45:00	00/00/00 47:00	
Ba Carrier Method: 9320 - I	73.1 Radium-228 ((GFPC)	40 - 110					08/13/20 15:23	09/06/20 17:28	
Method: 9320 - I		(GFPC)	Count	Total				08/13/20 15:23	09/06/20 17:28	,
-		(GFPC)		Total Uncert.				08/13/20 15:23	09/06/20 17:28	,
-	Radium-228 ((GFPC) Qualifier	Count		RL	MDC	Unit	08/13/20 15:23	Analyzed	Dil Fac
Method: 9320 - I	Radium-228 (`	Count Uncert.	Uncert.	RL 1.00	MDC 0.693				Dil Fac
Method: 9320 - I	Radium-228 (Result 1.51	` '	Count Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Analyzed	1
Method: 9320 - I	Radium-228 (Result 1.51	Qualifier	Count Uncert. (2σ+/-) 0.516	Uncert. (2σ+/-)				Prepared 08/13/20 16:06	Analyzed 09/01/20 12:00 Analyzed	Dil Fac

Method: Ra226_Ra	228 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.85		0.540	0.558	5.00	0.693	pCi/L		09/28/20 11:11	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14584 MW-8

Lab Sample ID: 400-191957-13 Date Collected: 08/05/20 11:24 **Matrix: Water** Date Received: 08/10/20 14:30

6 (GFPC)	Radium-226	9315	Method:	
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				Count Uncert.	Total Uncert.						
Analyte		Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-2	26	-0.00893	U	0.148	0.148	1.00	0.315	pCi/L	09/15/20 23:38	09/25/20 14:24	1
Carrier		%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	•	87.2		40 - 110					09/15/20 23:38	09/25/20 14:24	

Method: 9320 -		J. 1 J,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.106	U G	0.929	0.929	1.00	1.68	pCi/L	09/03/20 15:00	09/15/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					09/03/20 15:00	09/15/20 13:10	1
Y Carrier	76.3		40 - 110					09/03/20 15:00	09/15/20 13:10	1

Method: Ra226 Ra228 - Combined Radium-226 and Radium-228

Method. Nazzo_Na	220 - 0011	ibilieu iva	ululli-220 a	iiu itauiui	11-220					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	-0.115	U	0.941	0.941	5.00	1.68	pCi/L		09/27/20 15:23	1

+ 228

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14585 MW-12H

Date Collected: 08/05/20 12:50 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-14

Matrix: Water

Method: 9315	- Radium-226 ((GFPC)								
			Count Uncert.	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.171	U	0.191	0.192	1.00	0.306	pCi/L	09/15/20 23:38	09/25/20 14:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					09/15/20 23:38	09/25/20 14:24	1

Method: 9320 - I	Radium-228 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.477	UG	0.915	0.916	1.00	1.70	pCi/L	09/03/20 15:00	09/15/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					09/03/20 15:00	09/15/20 13:10	1
Y Carrier	80.7		40 - 110					09/03/20 15:00	09/15/20 13:10	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.306	U	0.935	0.936	5.00	1.70	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14586 MW-12V

Date Collected: 08/05/20 13:47 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-15 **Matrix: Water**

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.143	U	0.156	0.157	1.00	0.244	pCi/L	09/15/20 23:38	09/25/20 20:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					09/15/20 23:38	09/25/20 20:19	1

Method: 9320 - I	Radium-228 (GFPC)								
		·	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.427	UG	0.847	0.848	1.00	1.60	pCi/L	09/03/20 15:00	09/15/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					09/03/20 15:00	09/15/20 13:10	1
Y Carrier	75.9		40 - 110					09/03/20 15:00	09/15/20 13:10	1

Method: Ra226_Ra2	228 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.284	U	0.861	0.862	5.00	1.60	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14587 FB-3

Date Collected: 08/05/20 14:10 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-16 **Matrix: Water**

Method: 9315 - F	Radium-226 (GFPC)								
	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0498	U	0.127	0.127	1.00	0.243	pCi/L	09/15/20 23:38	09/25/20 20:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					09/15/20 23:38	09/25/20 20:19	1

Method: 9320 -	Radium-228 (GFPC)								
	`	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0751	U G	0.777	0.777	1.00	1.42	pCi/L	09/03/20 15:00	09/15/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					09/03/20 15:00	09/15/20 13:10	1
Y Carrier	80.4		40 - 110					09/03/20 15:00	09/15/20 13:10	1

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n- 22 8					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	-0.0252	U	0.787	0.787	5.00	1.42	pCi/L		09/27/20 15:23	1
+ 228										

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14588 MW-1L

Lab Sample ID: 400-191957-17 Date Collected: 08/03/20 11:45 **Matrix: Water** Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.152	U	0.212	0.213	1.00	0.359	pCi/L	09/15/20 23:38	09/25/20 20:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		40 - 110					09/15/20 23:38	09/25/20 20:19	1

Method: 9320 -	Radium-228 (GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.278	U G	0.801	0.802	1.00	1.49	pCi/L	09/03/20 15:00	09/15/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		40 - 110					09/03/20 15:00	09/15/20 13:10	1
Y Carrier	77.4		40 - 110					09/03/20 15:00	09/15/20 13:10	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.127	U	0.829	0.830	5.00	1.49	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14589 MW-1L DUP

Lab Sample ID: 400-191957-18 Date Collected: 08/03/20 11:45 **Matrix: Water**

Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0729	U	0.163	0.164	1.00	0.301	pCi/L	09/15/20 23:38	09/25/20 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					09/15/20 23:38	09/25/20 20:20	1

Method: 9320 -	Kaululli-220 (GIFC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.530	U G	0.993	0.994	1.00	1.69	pCi/L	09/03/20 15:00	09/15/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					09/03/20 15:00	09/15/20 13:10	1
Y Carrier	77.0		40 - 110					09/03/20 15:00	09/15/20 13:10	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.603	U	1.01	1.01	5.00	1.69	pCi/L	_	09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

78.3

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14590 MW-2L

Ba Carrier

Lab Sample ID: 400-191957-19 Date Collected: 08/03/20 12:55 Date Received: 08/10/20 14:30

40 - 110

Matrix: Water

09/15/20 23:38 09/25/20 20:18

Method: 9315 - I	Radium-226 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0330	U	0.132	0.132	1.00	0.306	pCi/L	09/15/20 23:38	09/25/20 20:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.921	UG	1.10	1.10	1.00	1.81	pCi/L	09/03/20 15:00	09/15/20 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.3		40 - 110					09/03/20 15:00	09/15/20 13:11	1
Y Carrier	75.5		40 - 110					09/03/20 15:00	09/15/20 13:11	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.888	U	1.11	1.11	5.00	1.81	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14591 MW-3L

Lab Sample ID: 400-191957-20 Date Collected: 08/03/20 14:28 Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result C	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0334 U	J	0.123	0.123	1.00	0.245	pCi/L	09/15/20 23:38	09/25/20 20:18	1
Carrier Ba Carrier	87.2 6	Qualifier	Limits 40 - 110					Prepared 09/15/20 23:38	Analyzed 09/25/20 20:18	Dil Fac

Method: 9320 - F	Radium-228 (GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.731	UG	1.00	1.00	1.00	1.67	pCi/L	09/03/20 15:00	09/15/20 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					09/03/20 15:00	09/15/20 13:11	1
Y Carrier	76.3		40 - 110					09/03/20 15:00	09/15/20 13:11	1

Welliou. Razzo_Ra.	220 - CUII	ibilieu Ka	ululli-220 a	iliu Kaululi	1-220					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.765	U	1.01	1.01	5.00	1.67	pCi/L		09/27/20 15:23	1

+ 228

Matrix: Water

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14592 MW-11H

Carrier

Ba Carrier

Y Carrier

%Yield Qualifier

87.5

78.9

Limits

40 - 110

40 - 110

Lab Sample ID: 400-191957-21 Date Collected: 08/04/20 09:35 **Matrix: Water** Date Received: 08/10/20 14:30

		<u> </u>								
_ Method: 9315 - Ra	dium-226 ((GFPC)								
		,	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0481	U	0.130	0.130	1.00	0.250	pCi/L	09/15/20 23:38	09/25/20 20:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					09/15/20 23:38	09/25/20 20:18	
- Method: 9320 - Ra	dium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0166	UG	0.757	0.757	1.00	1.37	pCi/L	09/03/20 15:00	09/15/20 13:11	1

Method: Ra226_Ra2	228 - Con	ibined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0315	U	0.768	0.768	5.00	1.37	pCi/L		09/27/20 15:23	1

Prepared

<u>09/03/20 15:00</u> <u>09/15/20 13:11</u>

09/03/20 15:00 09/15/20 13:11

Analyzed

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14593 MW-11H DUP

Lab Sample ID: 400-191957-22 Date Collected: 08/04/20 09:35 **Matrix: Water** Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.137	U	0.157	0.157	1.00	0.252	pCi/L	09/15/20 23:38	09/25/20 20:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					09/15/20 23:38	09/25/20 20:18	1

Analyta	Popult	Qualifier	Count Uncert.	Total Uncert.	ы	MDC	Unit	Dronored	Analyzad	Dil Fac
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL _	MIDC	Unit	Prepared	Analyzed	DII Fac
Radium-228	-0.0321	UG	0.835	0.835	1.00	1.50	pCi/L	09/03/20 15:00	09/15/20 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					09/03/20 15:00	09/15/20 13:12	1
Y Carrier	78.9		40 - 110					09/03/20 15:00	09/15/20 13:12	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.105	U	0.850	0.850	5.00	1.50	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14594 MW-13H

Lab Sample ID: 400-191957-23 Date Collected: 08/04/20 11:10 Date Received: 08/10/20 14:30

– Method: 9315 - Rad	lium-226 (GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0681	U	0.149	0.149	1.00	0.275	pCi/L	09/15/20 23:38	09/25/20 20:18	1
Carrier Ba Carrier	%Yield 88.4	Qualifier	Limits 40 - 110					Prepared 09/15/20 23:38	Analyzed 09/25/20 20:18	Dil Fac

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.470	UG	0.851	0.852	1.00	1.61	pCi/L	09/03/20 15:00	09/15/20 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					09/03/20 15:00	09/15/20 13:12	1
Y Carrier	80.7		40 - 110					09/03/20 15:00	09/15/20 13:12	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.402	U	0.864	0.865	5.00	1.61	pCi/L		09/27/20 15:23	1

Matrix: Water

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14595 MW-9H

Lab Sample ID: 400-191957-24 Date Collected: 08/04/20 12:20 **Matrix: Water** Date Received: 08/10/20 14:30

			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.168	U	0.163	0.163	1.00	0.247	pCi/L	09/15/20 23:38	09/25/20 20:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					09/15/20 23:38	09/25/20 20:18	

			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.554	UG	0.707	0.709	1.00	1.39	pCi/L	09/03/20 15:00	09/15/20 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					09/03/20 15:00	09/15/20 13:12	1
Y Carrier			40 - 110					00/00/00 45 00	09/15/20 13:12	

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.385	U	0.726	0.727	5.00	1.39	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14596 MW-9V

Lab Sample ID: 400-191957-25 Date Collected: 08/04/20 15:30 **Matrix: Water**

Date Received: 08/10/20 14:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.109	U	0.176	0.176	1.00	0.306	pCi/L	09/15/20 23:38	09/25/20 20:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					09/15/20 23:38	09/25/20 20:15	1

Method: 9320 - I	Radium-228 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.729	UG	0.845	0.848	1.00	1.39	pCi/L	09/03/20 15:00	09/15/20 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					09/03/20 15:00	09/15/20 13:12	1
Y Carrier	81.5		40 - 110					09/03/20 15:00	09/15/20 13:12	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.837	U	0.863	0.866	5.00	1.39	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14597 MW-4L

Lab Sample ID: 400-191957-26 Date Collected: 08/05/20 09:55 Date Received: 08/10/20 14:30

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0556	U	0.139	0.139	1.00	0.327	pCi/L	09/15/20 23:38	09/25/20 20:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					09/15/20 23:38	09/25/20 20:16	1

Method: 9320 - Rad	dium-228 (GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.620	U G	1.01	1.01	1.00	1.70	pCi/L	09/03/20 15:00	09/15/20 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					09/03/20 15:00	09/15/20 13:12	1
Y Carrier	82.6		40 - 110					09/03/20 15:00	09/15/20 13:12	1

Method: Ra226_Ra2	228 - Com	ibined Ra	idium-226 a	ind Radiur	n-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.565	U	1.02	1.02	5.00	1.70	pCi/L		09/27/20 15:23	1

+ 228

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14598 MW-14H

Date Collected: 08/05/20 11:10 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-27

Matrix: Water

Method: 9315 - Ra	adium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0304	U	0.138	0.138	1.00	0.279	pCi/L	09/15/20 23:38	09/25/20 22:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.0		40 - 110					09/15/20 23:38	09/25/20 22:42	1
_										

Method: 9320 - I	Radium-228 ((GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.728	UG	1.02	1.03	1.00	1.71	pCi/L	09/03/20 15:00	09/15/20 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.0		40 - 110					09/03/20 15:00	09/15/20 13:14	1
Y Carrier	83.0		40 - 110					09/03/20 15:00	09/15/20 13:14	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.758	U	1.03	1.04	5.00	1.71	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14599 MW-4

Lab Sample ID: 400-191957-28 Date Collected: 08/05/20 12:08 Date Received: 08/10/20 14:30

Matrix: Water

Date	Received.	00/10/20	14.30	
_				

+ 228

Method: 9315 - Ra	adium-226 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.136	U	0.164	0.165	1.00	0.269	pCi/L	09/15/20 23:38	09/25/20 22:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					09/15/20 23:38	09/25/20 22:42	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.253	UG	0.821	0.822	1.00	1.43	pCi/L	09/03/20 15:00	09/15/20 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					09/03/20 15:00	09/15/20 13:14	1
Y Carrier	84.9		40 - 110					09/03/20 15:00	09/15/20 13:14	1

 Method: Ra226_Ra2	228 - Com	nbined Ra	dium-226 a	ınd Radiur	m-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.389	U	0.837	0.838	5.00	1.43	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14600 MW-4V

Lab Sample ID: 400-191957-29 Date Collected: 08/05/20 13:05 **Matrix: Water**

Date Received: 08/10/20 14:30

Method: 9315 - R	Radium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0258	U	0.202	0.202	1.00	0.393	pCi/L	09/15/20 23:38	09/25/20 22:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		40 - 110					09/15/20 23:38	09/25/20 22:40	1

Method: 9320 -	Radium-228 ((GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.508	UG	0.976	0.977	1.00	1.66	pCi/L	09/03/20 15:00	09/15/20 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		40 - 110					09/03/20 15:00	09/15/20 13:14	1
Y Carrier	83.0		40 - 110					09/03/20 15:00	09/15/20 13:14	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.533	U	0.997	0.998	5.00	1.66	pCi/L		09/27/20 15:23	1

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14601 FB-2

Date Collected: 08/05/20 13:30 Date Received: 08/10/20 14:30 Lab Sample ID: 400-191957-30

Matrix: Water

Method: 9315 -	Radium-226 (GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.238	U	0.184	0.186	1.00	0.251	pCi/L	09/15/20 23:38	09/25/20 22:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					09/15/20 23:38	09/25/20 22:40	1

Method: 9320 - I	Radium-228 ((GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.000	UG	0.801	0.801	1.00	1.44	pCi/L	09/03/20 15:00	09/15/20 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					09/03/20 15:00	09/15/20 13:14	1
Y Carrier	86.4		40 - 110					09/03/20 15:00	09/15/20 13:14	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.238	U	0.822	0.822	5.00	1.44	pCi/L		09/27/20 15:23	1

Client Sample Results

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14602 EB-1

Date Collected: 08/05/20 13:45 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-31

Matrix: Water

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.108	U	0.161	0.161	1.00	0.276	pCi/L	09/15/20 23:38	09/25/20 22:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					09/15/20 23:38	09/25/20 22:41	1

Method: 9320 -		, ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.808	UG	0.779	0.782	1.00	1.52	pCi/L	09/03/20 15:00	09/15/20 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					09/03/20 15:00	09/15/20 13:14	1
Y Carrier	88.6		40 - 110					09/03/20 15:00	09/15/20 13:14	1

Method: Ra226_Ra2	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.700	U	0.795	0.798	5.00	1.52	pCi/L		09/27/20 15:23	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Qualifiers

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML Most Probable Number MPN MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

Presumptive **PRES Quality Control** QC

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) Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Project/Site: CCR Plant Gorgas

Client Sample ID: BA14572 EB-2

Client: Alabama Power General Test Laboratory

Date Collected: 08/03/20 10:15 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 12:29	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481318	09/01/20 11:56	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:10	CMM	TAL SL

Client Sample ID: BA14573 PZ-18

Date Collected: 08/03/20 11:00 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 12:30	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481318	09/01/20 11:56	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Client Sample ID: BA14574 PZ-19

Date Collected: 08/03/20 12:50 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-3

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 15:30	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481318	09/01/20 11:56	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Client Sample ID: BA14575 PZ-20

Date Collected: 08/03/20 13:59 Date Received: 08/10/20 14:30

Lab Sample ID: 400-191957-4 **Matrix: Water**

Batch Batch Dilution Batch Prepared Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Total/NA PrecSep-21 479478 08/13/20 15:23 MNH TAL SL Prep Total/NA Analysis 9315 481674 09/06/20 15:32 JLW TAL SL 1 479482 08/13/20 16:06 MNH TAL SL Total/NA Prep PrecSep_0 Total/NA Analysis 9320 481274 09/01/20 11:59 JLW TAL SL Total/NA Analysis Ra226 Ra228 484013 09/28/20 11:11 CMM TAL SL

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14576 PZ-20 DUP

Lab Sample ID: 400-191957-5 Date Collected: 08/03/20 13:59 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 15:32	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481274	09/01/20 11:59	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Client Sample ID: BA14577 FB-1

Lab Sample ID: 400-191957-6 Date Collected: 08/03/20 14:45 **Matrix: Water**

Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 15:33	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481274	09/01/20 11:59	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Client Sample ID: BA14578 PZ-21

Lab Sample ID: 400-191957-7 Date Collected: 08/04/20 08:53 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 15:33	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481274	09/01/20 11:59	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Client Sample ID: BA14579 PZ-22

Lab Sample ID: 400-191957-8 Date Collected: 08/04/20 10:00 **Matrix: Water** Date Received: 08/10/20 14:30

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 15:33	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481274	09/01/20 11:59	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14580 PZ-17

Lab Sample ID: 400-191957-9 Date Collected: 08/04/20 11:20 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 15:34	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481274	09/01/20 11:59	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Client Sample ID: BA14581 MW-3V

Lab Sample ID: 400-191957-10 Date Collected: 08/04/20 13:01 **Matrix: Water**

Date Received: 08/10/20 14:30

	Batc	n Batch		Dilution	Batch	Prepared		
Prep Typ	ре Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-2	21		479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analy	rsis 9315		1	481674	09/06/20 15:34	JLW	TAL SL
Total/NA	Prep	PrecSep_	.0		479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analy	rsis 9320		1	481274	09/01/20 12:00	JLW	TAL SL
Total/NA	Analy	sis Ra226_R	a228	1	484013	09/28/20 11:11	CMM	TAL SL

Lab Sample ID: 400-191957-11 Client Sample ID: BA14582 MW-3 **Matrix: Water**

Date Collected: 08/04/20 15:35 Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 15:34	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481274	09/01/20 12:00	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Client Sample ID: BA14583 MW-8V Lab Sample ID: 400-191957-12

Date Collected: 08/05/20 10:20 Date Received: 08/10/20 14:30

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			479478	08/13/20 15:23	MNH	TAL SL
Total/NA	Analysis	9315		1	481674	09/06/20 17:28	JLW	TAL SL
Total/NA	Prep	PrecSep_0			479482	08/13/20 16:06	MNH	TAL SL
Total/NA	Analysis	9320		1	481274	09/01/20 12:00	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484013	09/28/20 11:11	CMM	TAL SL

Matrix: Water

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14584 MW-8

Lab Sample ID: 400-191957-13 Date Collected: 08/05/20 11:24 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 14:24	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:10	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14585 MW-12H

Lab Sample ID: 400-191957-14 Date Collected: 08/05/20 12:50 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 14:24	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:10	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14586 MW-12V

Lab Sample ID: 400-191957-15 Date Collected: 08/05/20 13:47 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:19	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:10	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14587 FB-3

Lab Sample ID: 400-191957-16 Date Collected: 08/05/20 14:10 **Matrix: Water** Date Received: 08/10/20 14:30

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:19	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:10	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

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Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14588 MW-1L

Lab Sample ID: 400-191957-17 Date Collected: 08/03/20 11:45 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:19	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:10	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14589 MW-1L DUP

Lab Sample ID: 400-191957-18 Date Collected: 08/03/20 11:45 **Matrix: Water** Date Received: 08/10/20 14:30

Batch	Batch	Batch		Dilution	Batch			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:20	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:10	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14590 MW-2L

Lab Sample ID: 400-191957-19 Date Collected: 08/03/20 12:55 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:18	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:11	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14591 MW-3L

Lab Sample ID: 400-191957-20 Date Collected: 08/03/20 14:28 **Matrix: Water** Date Received: 08/10/20 14:30

Batch		Batch		Dilution	Batch	Prepared	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL	
Total/NA	Analysis	9315		1	483637	09/25/20 20:18	SCB	TAL SL	
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL	
Total/NA	Analysis	9320		1	482524	09/15/20 13:11	CMM	TAL SL	
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL	

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Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14592 MW-11H

Lab Sample ID: 400-191957-21 Date Collected: 08/04/20 09:35 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:18	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:11	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14593 MW-11H DUP

Lab Sample ID: 400-191957-22 Date Collected: 08/04/20 09:35 **Matrix: Water** Date Received: 08/10/20 14:30

Batch	Batch		Dilution	Dilution Batch Prepared				
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:18	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:12	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14594 MW-13H

Lab Sample ID: 400-191957-23 Date Collected: 08/04/20 11:10 **Matrix: Water** Date Received: 08/10/20 14:30

Batch	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:18	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:12	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14595 MW-9H

Lab Sample ID: 400-191957-24 Date Collected: 08/04/20 12:20 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:18	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:12	CMM	TAL SL
Total/NA	Analysis	Ra226 Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

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Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14596 MW-9V

Lab Sample ID: 400-191957-25 Date Collected: 08/04/20 15:30 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:15	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:12	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14597 MW-4L Lab Sample ID: 400-191957-26

Date Collected: 08/05/20 09:55 **Matrix: Water**

Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 20:16	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482524	09/15/20 13:12	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Lab Sample ID: 400-191957-27 Client Sample ID: BA14598 MW-14H **Matrix: Water**

Date Collected: 08/05/20 11:10 Date Received: 08/10/20 14:30

Batch	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 22:42	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482538	09/15/20 13:14	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14599 MW-4 Lab Sample ID: 400-191957-28

Date Collected: 08/05/20 12:08 Date Received: 08/10/20 14:30

Batch		Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 22:42	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482538	09/15/20 13:14	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Matrix: Water

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Client Sample ID: BA14600 MW-4V

Lab Sample ID: 400-191957-29 Date Collected: 08/05/20 13:05 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 22:40	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482538	09/15/20 13:14	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14601 FB-2

Lab Sample ID: 400-191957-30 Date Collected: 08/05/20 13:30 **Matrix: Water** Date Received: 08/10/20 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 22:40	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482538	09/15/20 13:14	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Client Sample ID: BA14602 EB-1

Lab Sample ID: 400-191957-31 Date Collected: 08/05/20 13:45 **Matrix: Water** Date Received: 08/10/20 14:30

Batch	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482544	09/15/20 23:38	CMM	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 22:41	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481587	09/03/20 15:00	AVB	TAL SL
Total/NA	Analysis	9320		1	482538	09/15/20 13:14	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	483928	09/27/20 15:23	GRW	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Rad

Prep Batch: 479478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-191957-1	BA14572 EB-2	Total/NA	Water	PrecSep-21	
400-191957-2	BA14573 PZ-18	Total/NA	Water	PrecSep-21	
400-191957-3	BA14574 PZ-19	Total/NA	Water	PrecSep-21	
400-191957-4	BA14575 PZ-20	Total/NA	Water	PrecSep-21	
400-191957-5	BA14576 PZ-20 DUP	Total/NA	Water	PrecSep-21	
400-191957-6	BA14577 FB-1	Total/NA	Water	PrecSep-21	
400-191957-7	BA14578 PZ-21	Total/NA	Water	PrecSep-21	
400-191957-8	BA14579 PZ-22	Total/NA	Water	PrecSep-21	
400-191957-9	BA14580 PZ-17	Total/NA	Water	PrecSep-21	
400-191957-10	BA14581 MW-3V	Total/NA	Water	PrecSep-21	
400-191957-11	BA14582 MW-3	Total/NA	Water	PrecSep-21	
400-191957-12	BA14583 MW-8V	Total/NA	Water	PrecSep-21	
MB 160-479478/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-479478/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-191957-3 MS	BA14574 PZ-19	Total/NA	Water	PrecSep-21	
400-191957-3 MSD	BA14574 PZ-19	Total/NA	Water	PrecSep-21	
160-39069-B-1-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 479482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-191957-1	BA14572 EB-2	Total/NA	Water	PrecSep_0	
400-191957-2	BA14573 PZ-18	Total/NA	Water	PrecSep_0	
400-191957-3	BA14574 PZ-19	Total/NA	Water	PrecSep_0	
400-191957-4	BA14575 PZ-20	Total/NA	Water	PrecSep_0	
400-191957-5	BA14576 PZ-20 DUP	Total/NA	Water	PrecSep_0	
400-191957-6	BA14577 FB-1	Total/NA	Water	PrecSep_0	
400-191957-7	BA14578 PZ-21	Total/NA	Water	PrecSep_0	
400-191957-8	BA14579 PZ-22	Total/NA	Water	PrecSep_0	
400-191957-9	BA14580 PZ-17	Total/NA	Water	PrecSep_0	
400-191957-10	BA14581 MW-3V	Total/NA	Water	PrecSep_0	
400-191957-11	BA14582 MW-3	Total/NA	Water	PrecSep_0	
400-191957-12	BA14583 MW-8V	Total/NA	Water	PrecSep_0	
MB 160-479482/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-479482/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-191957-3 MS	BA14574 PZ-19	Total/NA	Water	PrecSep_0	
400-191957-3 MSD	BA14574 PZ-19	Total/NA	Water	PrecSep_0	
160-39069-B-1-B DU	Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 481587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-191957-13	BA14584 MW-8	Total/NA	Water	PrecSep_0	
400-191957-14	BA14585 MW-12H	Total/NA	Water	PrecSep_0	
400-191957-15	BA14586 MW-12V	Total/NA	Water	PrecSep_0	
400-191957-16	BA14587 FB-3	Total/NA	Water	PrecSep_0	
400-191957-17	BA14588 MW-1L	Total/NA	Water	PrecSep_0	
400-191957-18	BA14589 MW-1L DUP	Total/NA	Water	PrecSep_0	
400-191957-19	BA14590 MW-2L	Total/NA	Water	PrecSep_0	
400-191957-20	BA14591 MW-3L	Total/NA	Water	PrecSep_0	
400-191957-21	BA14592 MW-11H	Total/NA	Water	PrecSep_0	
400-191957-22	BA14593 MW-11H DUP	Total/NA	Water	PrecSep_0	
400-191957-23	BA14594 MW-13H	Total/NA	Water	PrecSep_0	

Eurofins TestAmerica, Pensacola

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QC Association Summary

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Rad (Continued)

Prep Batch: 481587 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-191957-24	BA14595 MW-9H	Total/NA	Water	PrecSep_0	
400-191957-25	BA14596 MW-9V	Total/NA	Water	PrecSep_0	
400-191957-26	BA14597 MW-4L	Total/NA	Water	PrecSep_0	
400-191957-27	BA14598 MW-14H	Total/NA	Water	PrecSep_0	
400-191957-28	BA14599 MW-4	Total/NA	Water	PrecSep_0	
400-191957-29	BA14600 MW-4V	Total/NA	Water	PrecSep_0	
400-191957-30	BA14601 FB-2	Total/NA	Water	PrecSep_0	
400-191957-31	BA14602 EB-1	Total/NA	Water	PrecSep_0	
MB 160-481587/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-481587/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-191957-26 MS	BA14597 MW-4L	Total/NA	Water	PrecSep_0	
400-191957-26 MSD	BA14597 MW-4L	Total/NA	Water	PrecSep_0	

Prep Batch: 482544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
400-191957-13	BA14584 MW-8	Total/NA	Water	PrecSep-21	
400-191957-14	BA14585 MW-12H	Total/NA	Water	PrecSep-21	
400-191957-15	BA14586 MW-12V	Total/NA	Water	PrecSep-21	
400-191957-16	BA14587 FB-3	Total/NA	Water	PrecSep-21	
400-191957-17	BA14588 MW-1L	Total/NA	Water	PrecSep-21	
400-191957-18	BA14589 MW-1L DUP	Total/NA	Water	PrecSep-21	
400-191957-19	BA14590 MW-2L	Total/NA	Water	PrecSep-21	
400-191957-20	BA14591 MW-3L	Total/NA	Water	PrecSep-21	
400-191957-21	BA14592 MW-11H	Total/NA	Water	PrecSep-21	
400-191957-22	BA14593 MW-11H DUP	Total/NA	Water	PrecSep-21	
400-191957-23	BA14594 MW-13H	Total/NA	Water	PrecSep-21	
400-191957-24	BA14595 MW-9H	Total/NA	Water	PrecSep-21	
400-191957-25	BA14596 MW-9V	Total/NA	Water	PrecSep-21	
400-191957-26	BA14597 MW-4L	Total/NA	Water	PrecSep-21	
400-191957-27	BA14598 MW-14H	Total/NA	Water	PrecSep-21	
400-191957-28	BA14599 MW-4	Total/NA	Water	PrecSep-21	
400-191957-29	BA14600 MW-4V	Total/NA	Water	PrecSep-21	
400-191957-30	BA14601 FB-2	Total/NA	Water	PrecSep-21	
400-191957-31	BA14602 EB-1	Total/NA	Water	PrecSep-21	
MB 160-482544/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-482544/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-191957-26 MS	BA14597 MW-4L	Total/NA	Water	PrecSep-21	
400-191957-26 MSD	BA14597 MW-4L	Total/NA	Water	PrecSep-21	

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Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-479478/23-A

Lab Sample ID: LCS 160-479478/1-A

Matrix: Water

Analysis Batch: 481674

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 479478

MB MB Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-226 -0.005710 U 0.0989 0.0989 1.00 0.199 pCi/L 08/13/20 15:23 09/06/20 17:28

Total

MB

Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 92.1 40 - 110 08/13/20 15:23 09/06/20 17:28

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 479478

Total LCS LCS %Rec. **Spike** Uncert.

Count

Analyte Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-226 15.1 13.92 1.49 1.00 0.202 pCi/L 92 75 - 125

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 92.1 40 - 110

Lab Sample ID: 400-191957-3 MS Client Sample ID: BA14574 PZ-19

Matrix: Water

Matrix: Water

Analysis Batch: 481674

Analysis Batch: 481674

Prep Type: Total/NA Prep Batch: 479478 Total

Uncert. %Rec. Sample Sample Spike MS MS Analyte Result Qual Added $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Result Qual Radium-226 0.109 U 15.1 1.48 1.00 0.223 pCi/L 89 75 - 138 13.54

MS MS Carrier %Yield Qualifier Limits Ba Carrier 81.3 40 - 110

Lab Sample ID: 400-191957-3 MSD Client Sample ID: BA14574 PZ-19

Matrix: Water

Prep Type: Total/NA Analysis Batch: 481674 Prep Batch: 479478 Total

Sample Sample Spike MSD MSD Uncert. %Rec. **RER** Analyte Result Qual Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits RER Limit 0.109 U Radium-226 15.1 12.32 1.36 1.00 0.177 pCi/L 81 75 - 138 0.43

MSD MSD %Yield Qualifier Limits

Carrier Ba Carrier 81.6 40 - 110

Lab Sample ID: 160-39069-B-1-A DU **Client Sample ID: Duplicate** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 481674

Total DU DU Sample Sample Uncert. **RER** Analyte Result Qual Result Qual $(2\sigma + / -)$ RL **MDC** Unit RER Limit Radium-226 -0.0263 U 0.1225 U 0.101 1.00 0.142 pCi/L 0.89

Eurofins TestAmerica, Pensacola

Prep Batch: 479478

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Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

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

Lab Sample ID: 160-39069-B-1-A DU **Client Sample ID: Duplicate** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 481674

DU DU

Carrier %Yield Qualifier Limits Ba Carrier 619 40 - 110

Lab Sample ID: MB 160-482544/23-A **Client Sample ID: Method Blank**

Analysis Batch: 483637

Matrix: Water Prep Type: Total/NA **Prep Batch: 482544**

Total

Prep Batch: 479478

MB MB Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-226 0.08992 0.169 0.169 1.00 0.306 pCi/L 09/15/20 23:38 09/25/20 22:40

> MB MB

Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 74.9 40 - 110 09/15/20 23:38 09/25/20 22:40

Client Sample ID: Lab Control Sample

Matrix: Water Prep Type: Total/NA **Analysis Batch: 483637 Prep Batch: 482544**

Total

Count

Spike LCS LCS %Rec. Uncert. Analyte Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits 37.8 1.00 75 - 125 Radium-226 34.32 3.66 0.403 pCi/L 91

LCS LCS

Carrier %Yield Qualifier Limits Ba Carrier 74.6 40 - 110

Lab Sample ID: LCS 160-482544/1-A

Lab Sample ID: 400-191957-26 MS Client Sample ID: BA14597 MW-4L

Matrix: Water

Analysis Batch: 483637

Prep Type: Total/NA **Prep Batch: 482544**

Total Sample Sample **Spike** MS MS

Uncert. %Rec. Result Qual Added $(2\sigma + / -)$ RL **MDC** Unit Limits Analyte Result Qual %Rec Radium-226 -0.0556 U 75 - 138 35.6 31.87 3.33 1.00 0.306 pCi/L 89

MS MS

Carrier %Yield Qualifier Limits 40 - 110 Ba Carrier 89.6

Lab Sample ID: 400-191957-26 MSD Client Sample ID: BA14597 MW-4L Prep Type: Total/NA

Matrix: Water

Analysis Batch: 483637 **Prep Batch: 482544**

Total Sample Sample Spike MSD MSD Uncert.

%Rec. **RER** Analyte Result Qual Added RL **MDC** Unit %Rec Limits RER Limit Result Qual $(2\sigma + / -)$ Radium-226 -0.0556 U 35.8 30.25 1.00 0.247 pCi/L 75 - 138 0.25 3.16 85

MSD MSD

Carrier %Yield Qualifier Limits Ba Carrier 91.4 40 - 110

Eurofins TestAmerica, Pensacola

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Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-479482/23-A

Matrix: Water

Analysis Batch: 481274

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 479482

MB MB Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-228 0.5001 U 0.382 0.385 1.00 0.601 pCi/L 08/13/20 16:06 09/01/20 12:00

Total

Count

MB

Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 92.1 40 - 110 08/13/20 16:06 09/01/20 12:00 Y Carrier 75.9 40 - 110 08/13/20 16:06 09/01/20 12:00

Lab Sample ID: LCS 160-479482/1-A

Matrix: Water

Analysis Batch: 481318

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 479482

Total Spike LCS LCS Uncert. %Rec. Added RL **MDC** Unit %Rec Limits Analyte Result Qual $(2\sigma + / -)$ 1.00 Radium-228 10.5 9.576 1.24 0.602 pCi/L 92 75 - 125

LCS LCS

Carrier %Yield Qualifier Limits 40 - 110 Ba Carrier 92.1 Y Carrier 76.6 40 - 110

Lab Sample ID: 400-191957-3 MS Client Sample ID: BA14574 PZ-19

Matrix: Water

Analysis Batch: 481318

Prep Type: Total/NA

Prep Batch: 479482

Total Sample Sample Spike MS MS Uncert. %Rec. Analyte Result Qual Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-228 0.543 U 10.5 9.332 1.25 1.00 0.647 pCi/L 84 45 - 150

MS MS Carrier %Yield Qualifier Limits Ba Carrier 81.3 40 - 110 Y Carrier 78.5 40 - 110

Lab Sample ID: 400-191957-3 MSD Client Sample ID: BA14574 PZ-19

Matrix: Water

Analysis Batch: 481318

Prep Type: Total/NA

Prep Batch: 479482

Total

Spike Sample Sample MSD MSD Uncert. %Rec. **RER** Added Analyte Result Qual Result Qual $(2\sigma + / -)$ RL MDC Unit %Rec Limits RER Limit Radium-228 0.543 U 10.5 9.850 1.28 1.00 0.646 pCi/L 89 45 - 150 0.20

MSD MSD

%Yield Qualifier Carrier Limits Ba Carrier 81.6 40 - 110 Y Carrier 83.0 40 - 110

Eurofins TestAmerica, Pensacola

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

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

Lab Sample ID: 160-39069-B-1-B DU

Matrix: Water

Analysis Batch: 481318

Client Sample ID: Duplicate Prep Type: Total/NA

Prep Batch: 479482

Total DU DU Uncert. **RER** Sample Sample Analyte Result Qual Result Qual $(2\sigma + / -)$ RL**MDC** Unit RER Limit Radium-228 0.244 U 0.1961 U 0.440 1.00 0.754 pCi/L 0.06

DU DU

Carrier %Yield Qualifier Limits Ba Carrier 61.9 40 - 110 Y Carrier 68.0 40 - 110

Lab Sample ID: MB 160-481587/23-A Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 482538

Prep Type: Total/NA

Prep Batch: 481587

Count Total MB MB Uncert. Uncert. Result Qualifier RL **MDC** Unit Analyte $(2\sigma + / -)$ $(2\sigma + / -)$ Prepared Analyzed Dil Fac Radium-228 1.72 pCi/L 09/03/20 15:00 09/15/20 13:15 0.0000 UΘ 0.954 0.954 1.00

> MB MB

Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac 40 - 110 09/03/20 15:00 09/15/20 13:15 Ba Carrier 74.9 40 - 110 09/03/20 15:00 09/15/20 13:15 Y Carrier 89.0

Lab Sample ID: LCS 160-481587/1-A **Client Sample ID: Lab Control Sample**

Matrix: Water

Analysis Batch: 482524

Prep Type: Total/NA

Prep Batch: 481587

Total

Spike LCS LCS Uncert. %Rec. Analyte Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-228 26.0 25.72 3.52 1.00 2.07 pCi/L 99 75 - 125

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 74.6 40 - 110 Y Carrier 80.7 40 - 110

Lab Sample ID: 400-191957-26 MS Client Sample ID: BA14597 MW-4L

Matrix: Water

Analysis Batch: 482538

Prep Type: Total/NA **Prep Batch: 481587**

Total

Spike Sample Sample MS MS Uncert. %Rec. Added Analyte Result Qual Result Qual $(2\sigma + / -)$ RL MDC Unit %Rec Limits Radium-228 0.620 U G 3.15 24.5 24.88 1.00 1.48 pCi/L 99 45 - 150

MS MS

%Yield Qualifier Carrier Limits Ba Carrier 89.6 40 - 110 Y Carrier 84.5 40 - 110

Eurofins TestAmerica, Pensacola

9/28/2020

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QC Sample Results

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

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

Lab Sample ID: 400-191957-26 MSD Client Sample ID: BA14597 MW-4L

Matrix: Water

Analysis Batch: 482538

Prep Type: Total/NA Prep Batch: 481587

						Total							
	Sample	Sample	Spike	MSD	MSD	Uncert.					%Rec.		RER
Analyte	Result	Qual	Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits	RER	Limit
Radium-228	0.620	U G	24.6	20.77		2.75	1.00	1.44	pCi/L	82	45 - 150	0.70	1

MSD MSD Carrier %Yield Qualifier Limits Ba Carrier 91.4 40 - 110 Y Carrier 87.1 40 - 110



400-191957 COC

3355 McLemore Drive Pensacola, FL 32514 Phone (850) 474-1001 Fax (850) 478-2671	Cha	in of	Custoc	Chain of Custody Record	p.d					DESCAPERME	THE KLADER IN CNURCOMMENTAL TESTINO
Client Information (Sub Contract Lab)	Sampler: Dallas Gentry			Lab PM Whitmire, Cheyenne R	Cheyenne	œ			ng No(s).	COC No 400-56525-24537.1	37.1
Client Contact. Laura Midkif	Phone:			E-Mail: cheyenne.	whitmire@	testame	icainc,com	State of Origin: Alabama		Page: Page 1 of 2	
Сотрапу: Alabama Power General Test Laboratory				Accreditations Required (See note).	itations Requ	uired (See r	iote).			Job #.	
Address: 744 County Rd 87 GSC#8	Due Date Requested:					Ā	nalysis R	Analysis Requested		Preservation Codes:	des: M - Heyane
Olty: Calera	TAT Requested (days):	Routine								B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zlp. AL, 35040						SFPC		_		D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: 205-664-6197	# 0d			(0)		8228		_	_	G - Amchlor H - Ascorbic Acid	S - HZSO4 T - TSP Dodecahydra
Email. Ibmidkif@southernco.com	WO#				70.0	1226R		_	_	1 - Ice J - DI Water	U - Acetone V - MCAA
Project Name	Project #					28, Ra		_		K-EDTA L-EDA	W - pH 4-5 Z - other (specify)
Site Site Gordas Gvpsum 1289	\$\$OW#.							_		of con	
sanda Idaelification Citare III is b III	Sample Date	Sample (C	Sample N Type (V	Matrix (Winwater, Swoolid, Onwasteroll, includit Hillored	W 4200 E.C	315_R3226, 93				redrnuM isto	o de la la companya de la companya d
	1	1		X		5					
BA14572	8/3/20	10:15	0	Water		×			F	1 EB-2 (Equipment Blank)	it Blank)
BA14573	8/3/20 1	11:00	0	Water		×				1 PZ-18	
BA14574	8/3/20 1	12:50	O	Water	×	×				3 PZ-19	
BA14575	8/3/20 1	13:59	O	Water		×				1 PZ-20	
BA14576	8/3/20	13:59	O	Water		×				1 PZ-20 DUP (Sample Duplicate)	mple Duplicate)
BA14577	8/3/20	14:45	O	Water		×				1 FB-1 (Field Blank)	ik)
BA14578	8/4/20 0	08:53	O	Water		×				4 PZ-21	
BA14579	8/4/20	10:00	D	Water		×				1 PZ-22	
BA14580	8/4/20	11:20	D	Water		×				1 PZ-17	
BA14581	8/4/20	13:01	O	Water		×				1 MW-3V	
BA14582	8/4/20	15:35	O	Water		×				1 MW-3	
BA14583	8/5/20	10:20	O	Water		×				4 MW-8V	
BA14584	8/5/20	11:24	9	Water		^	×			1 MW-8	
BA14585	8/5/20	12:50	0	Water		_	×			1 MW-12H	
BA14586	8/5/20	13:47	9	Water			×			1 MW-12V	
BA14587	8/5/20	14:10	9	Water			×			1 FB-3 (Field Blank)	nk)
		1			1	7	1			ist.	
Note Since laboratory accreditations are subject to change, TestAmerica, Laboratories, Inc., places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample sit currently maintain accreditation in the State of Origin listed above for analysis/less/smatrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided.	ica Laboratories, Inc. places the ow inalysis/tests/matrix being analyzed	mership of me	ethod, analyte &	accreditation co	mpliance up	on out subc	ontract labora	tories. This samp	le shipment is ed. Any chang	shipment is forwarded under chan-of-custody. If the laboratory does not Any changes to accreditation status should be brought to TestAmerica.	ody. If the laboratory do uld be brought to TestAm
Laboratories, Inc. attention immediately. If all requested accreditations Possible Hazard Identification	s are current to date, return the sign	ned Chain of	Custody attestir	g to said complic	Sample D	Merica La	(A fee ma	be assesse	d if sample	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	nan 1 month)
Oriconifrinda Deliverable Reguested: I. III. IV. Other (specify)				44048	Special In	struction	44048 Special Instructions/OC Requirements	rements:	sy Lab	Archive For	Months
Emoty Kit Dalinanished hy		oto.		Time		-		Meth	Method of Shinmen		
Relinguished by: Laura Midkiff	Date/Time 08/07/2020 08:10	08.10	× 4	1	Received	T DE			Date	1920 142h	1 Complete
Relinquished by:	Date/Time:		Ö	Company	Received by	od by:			Date/Tir		Company
Relinquished by	Date/Time:		ŏ	Company	Received by	ed by			Date/Time	ne	Company
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TestAmerica

Chain of Custody Record

TestAmerica Pensacola

I laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does restructions will be provided. Any changes to accreditation status should be brought to TestAmeric Special Instructions/Note MW-11H DUP (Sample Duplicate) Sample Disposal (4 fee may be assessed if samples are retained longer than 1 month)

Clent Disposal By Lab Months
Months MW-1L DUP (Sample Duplicate) EB-1 (Equipment Blank) 400-56525-24537.1 FB-2 (Field Blank) MW-14H MW-13H MW-9H **V6-WM** Analysis Requested 3315_Ra226, 9320_Ra228, Ra226Ra228_GFPC Lab PM Whitmire, Cheyenne R E-Mail. before the street blooms are subject to change. TestAmerica Laboratories Inc., places the conventing of method analytic & accreditation compliance upon unrently mantain accreditation in the State of Origin Institute above for analysisfratational being analysed. The samples must be shipped back to the TestAmerica lab alonatories, Inc. attention immediately. If all expessed becauseful acceptations are current to date, return to date, return to date, return to origin and consistent of the acceptance to respect or acceptance to the species of the properties of the species of the properties of the species of the specie 2 4200 CI E 2 4200 FC (off to say) GEMIEM miorias (C=Comp, Swold, G=grab) BT=TISSUE, AvAIL) Preservation Code. Water O O O O O O O O O O O O O O O 13:30 13:45 11:10 12:08 13:05 11:10 15:30 09:55 Sample 11:45 11:45 12:55 14:28 09:35 09:35 12:20 (AT Requested (days) **Due Date Requested** Sample Date Sampler TJ Daugherty Phone 8/5/20 8/5/20 8/5/20 8/5/20 8/3/20 8/3/20 8/4/20 8/4/20 8/4/20 8/4/20 8/4/20 8/5/20 8/5/20 8/3/20 8/3/20 Project # 40007143 Client Information (Sub Contract Lab) Custody Seals Intact: Custody Seal No Sample Identification - Client ID (Lab ID) 3355 McLemore Drive Pensacola, FL 32514 Phone (850) 474-1001 Fax (850) 478-2671 Mabama Power General Test Laboratory Possible Hazard Identification 744 County Rd 87 GSC#8 rgas Gypsum 1289 205-664-6197 aura Midkif e. Zip. BA14598 BA14599 BA14600 BA14590 BA14591 BA14593 BA14594 BA14595 BA14596 BA14597 BA14589 3A14592 BA14601 BA14602 BA14588

Client: Alabama Power General Test Laboratory

Job Number: 400-191957-1 SDG Number: Gorgas Gypsum 1289

Login Number: 191957 List Source: Eurofins TestAmerica, Pensacola

List Number: 1

Creator: Perez, Trina M

Creator: Perez, Irina M		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	30.0°C, 29.0°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client: Alabama Power General Test Laboratory

Job Number: 400-191957-1 SDG Number: Gorgas Gypsum 1289

Login Number: 191957 List Source: Eurofins TestAmerica, St. Louis
List Number: 2 List Creation: 08/12/20 05:51 PM

Creator: Boyd, Jacob C

oreator. Boya, sacob o		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

N/A

Residual Chlorine Checked.

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory

Job ID: 400-191957-1 Project/Site: CCR Plant Gorgas SDG: Gorgas Gypsum 1289

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	07-01-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
JSDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3	8/4/2020 13:56	Conductivity	4762.46	uS/cm
GS-GSA-MW-3	8/4/2020 13:56	DO	0.27	mg/L
GS-GSA-MW-3	8/4/2020 13:56	Depth to Water Detail	107.54	ft
GS-GSA-MW-3		Oxidation Reduction Potention	-9.08	mv
GS-GSA-MW-3	8/4/2020 13:56	рН	5.79	рН
GS-GSA-MW-3	8/4/2020 13:56	Temperature	21.71	С
GS-GSA-MW-3	8/4/2020 13:56	Turbidity	100	NTU
GS-GSA-MW-3	8/4/2020 14:01	Conductivity	4726.52	uS/cm
GS-GSA-MW-3	8/4/2020 14:01	DO	0.19	mg/L
GS-GSA-MW-3	8/4/2020 14:01	Depth to Water Detail	107.54	ft
GS-GSA-MW-3		Oxidation Reduction Potention	-13.2	mv
GS-GSA-MW-3	8/4/2020 14:01	рН	5.83	рН
GS-GSA-MW-3	8/4/2020 14:01	Temperature	21.54	С
GS-GSA-MW-3	8/4/2020 14:01	Turbidity	23	NTU
GS-GSA-MW-3	8/4/2020 14:06	Conductivity	4707.12	uS/cm
GS-GSA-MW-3	8/4/2020 14:06	DO	0.16	mg/L
GS-GSA-MW-3	8/4/2020 14:06	Depth to Water Detail	107.54	ft
GS-GSA-MW-3		Oxidation Reduction Potention	-16.73	mv
GS-GSA-MW-3	8/4/2020 14:06	рН	5.86	рН
GS-GSA-MW-3	8/4/2020 14:06	Temperature	21.31	С
GS-GSA-MW-3	8/4/2020 14:06	Turbidity	92	NTU
GS-GSA-MW-3	8/4/2020 14:11	Conductivity	4691.15	uS/cm
GS-GSA-MW-3	8/4/2020 14:11	DO	0.16	mg/L
GS-GSA-MW-3	8/4/2020 14:11	Depth to Water Detail	107.54	ft
GS-GSA-MW-3	8/4/2020 14:11	Oxidation Reduction Potention	-19.01	mv
GS-GSA-MW-3	8/4/2020 14:11	рН	5.88	рН
GS-GSA-MW-3	8/4/2020 14:11	Temperature	21.5	С
GS-GSA-MW-3	8/4/2020 14:11	Turbidity	82	NTU
GS-GSA-MW-3	8/4/2020 14:16	Conductivity	4662.12	uS/cm
GS-GSA-MW-3	8/4/2020 14:16		0.15	mg/L
GS-GSA-MW-3	8/4/2020 14:16	Depth to Water Detail	107.54	
GS-GSA-MW-3	8/4/2020 14:16	Oxidation Reduction Potention	-20.45	mv
GS-GSA-MW-3	8/4/2020 14:16	рН	5.9	pН
GS-GSA-MW-3	8/4/2020 14:16	Temperature	21.54	С
GS-GSA-MW-3	8/4/2020 14:16	Turbidity	52.4	NTU
GS-GSA-MW-3	8/4/2020 14:21	Conductivity	4652.29	uS/cm
GS-GSA-MW-3	8/4/2020 14:21	DO	0.15	mg/L
GS-GSA-MW-3	8/4/2020 14:21	Depth to Water Detail	107.54	ft
GS-GSA-MW-3	8/4/2020 14:21	Oxidation Reduction Potention	-21.82	mv
GS-GSA-MW-3	8/4/2020 14:21	рН	5.92	рН
GS-GSA-MW-3	8/4/2020 14:21	Temperature	21.54	С
GS-GSA-MW-3	8/4/2020 14:21	Turbidity	31.5	NTU
GS-GSA-MW-3	8/4/2020 14:26	Conductivity	4653.47	uS/cm
GS-GSA-MW-3	8/4/2020 14:26	DO	0.16	mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3	8/4/2020 14:26	Depth to Water Detail	107.54	ft
GS-GSA-MW-3	8/4/2020 14:26	Oxidation Reduction Potention	-23.21	mv
GS-GSA-MW-3	8/4/2020 14:26	рН	5.94	рН
GS-GSA-MW-3	8/4/2020 14:26	Temperature	21.38	C
GS-GSA-MW-3	8/4/2020 14:26	Turbidity	33.5	NTU
GS-GSA-MW-3	8/4/2020 14:31	Conductivity	4598.3	uS/cm
GS-GSA-MW-3	8/4/2020 14:31	DO	0.16	mg/L
GS-GSA-MW-3	8/4/2020 14:31	Depth to Water Detail	107.54	ft
GS-GSA-MW-3		Oxidation Reduction Potention	-24.22	mv
GS-GSA-MW-3	8/4/2020 14:31	рН	5.96	рН
GS-GSA-MW-3	8/4/2020 14:31	Temperature	21.12	С
GS-GSA-MW-3	8/4/2020 14:31	Turbidity	21.6	NTU
GS-GSA-MW-3	8/4/2020 14:36	Conductivity	4572.1	uS/cm
GS-GSA-MW-3	8/4/2020 14:36	DO	0.15	mg/L
GS-GSA-MW-3	8/4/2020 14:36	Depth to Water Detail	107.54	
GS-GSA-MW-3		Oxidation Reduction Potention	-24.76	mv
GS-GSA-MW-3	8/4/2020 14:36	рН	5.97	рН
GS-GSA-MW-3	8/4/2020 14:36	Temperature	21.19	С
GS-GSA-MW-3	8/4/2020 14:36		18.1	NTU
GS-GSA-MW-3	8/4/2020 14:41	Conductivity	4546.86	uS/cm
GS-GSA-MW-3	8/4/2020 14:41	·	0.15	mg/L
GS-GSA-MW-3	8/4/2020 14:41	Depth to Water Detail	107.54	
GS-GSA-MW-3		Oxidation Reduction Potention	-25.55	mv
GS-GSA-MW-3	8/4/2020 14:41	рН	5.99	рН
GS-GSA-MW-3	8/4/2020 14:41	Temperature	21.19	C
GS-GSA-MW-3	8/4/2020 14:41	Turbidity	16.1	NTU
GS-GSA-MW-3	8/4/2020 14:46	Ţ	4520.44	uS/cm
GS-GSA-MW-3	8/4/2020 14:46	DO	0.15	mg/L
GS-GSA-MW-3	8/4/2020 14:46	Depth to Water Detail	107.54	
GS-GSA-MW-3		Oxidation Reduction Potention	-26.17	
GS-GSA-MW-3	8/4/2020 14:46		5.99	
GS-GSA-MW-3	8/4/2020 14:46	Temperature	21.09	C
GS-GSA-MW-3	8/4/2020 14:46	Turbidity	16.5	NTU
GS-GSA-MW-3	8/4/2020 14:51	Conductivity	4605.12	uS/cm
GS-GSA-MW-3	8/4/2020 14:51	DO	0.15	mg/L
GS-GSA-MW-3	8/4/2020 14:51	Depth to Water Detail	107.54	_
GS-GSA-MW-3		Oxidation Reduction Potention	-26.79	mv
GS-GSA-MW-3	8/4/2020 14:51	рН	6	рН
GS-GSA-MW-3	8/4/2020 14:51	Temperature	21.15	•
GS-GSA-MW-3	8/4/2020 14:51	1	13.1	NTU
GS-GSA-MW-3	8/4/2020 14:56	•	4464.21	
GS-GSA-MW-3	8/4/2020 14:56	·	0.16	mg/L
GS-GSA-MW-3		Depth to Water Detail	107.54	-
GS-GSA-MW-3		Oxidation Reduction Potention	-27.23	mv

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3	8/4/2020 14:56	рН	6.01	
GS-GSA-MW-3	8/4/2020 14:56	Temperature	20.99	C
GS-GSA-MW-3	8/4/2020 14:56	Turbidity	11.1	NTU
GS-GSA-MW-3	8/4/2020 15:01	Conductivity	4437.03	uS/cm
GS-GSA-MW-3	8/4/2020 15:01	DO	0.15	mg/L
GS-GSA-MW-3	8/4/2020 15:01	Depth to Water Detail	107.54	ft
GS-GSA-MW-3	8/4/2020 15:01	Oxidation Reduction Potention	-27.84	mv
GS-GSA-MW-3	8/4/2020 15:01	рН	6.02	рН
GS-GSA-MW-3	8/4/2020 15:01	Temperature	21.18	С
GS-GSA-MW-3	8/4/2020 15:01	Turbidity	11.38	NTU
GS-GSA-MW-3	8/4/2020 15:06	Conductivity	4460.46	uS/cm
GS-GSA-MW-3	8/4/2020 15:06	DO	0.15	mg/L
GS-GSA-MW-3	8/4/2020 15:06	Depth to Water Detail	107.54	ft
GS-GSA-MW-3		Oxidation Reduction Potention	-28.73	mv
GS-GSA-MW-3	8/4/2020 15:06	рН	6.03	рН
GS-GSA-MW-3	8/4/2020 15:06	Temperature	21.33	C
GS-GSA-MW-3	8/4/2020 15:06		12.55	NTU
GS-GSA-MW-3	8/4/2020 15:11	Conductivity	4381.06	uS/cm
GS-GSA-MW-3	8/4/2020 15:11		0.15	mg/L
GS-GSA-MW-3	8/4/2020 15:11	Depth to Water Detail	107.54	
GS-GSA-MW-3		Oxidation Reduction Potention	-29.78	mv
GS-GSA-MW-3	8/4/2020 15:11	рН	6.05	рН
GS-GSA-MW-3	8/4/2020 15:11	Temperature	21.35	C
GS-GSA-MW-3	8/4/2020 15:11		11.17	NTU
GS-GSA-MW-3	8/4/2020 15:16		4522.99	uS/cm
GS-GSA-MW-3	8/4/2020 15:16	·	0.15	mg/L
GS-GSA-MW-3	8/4/2020 15:16	Depth to Water Detail	107.54	
GS-GSA-MW-3	8/4/2020 15:16	Oxidation Reduction Potention	-30.78	mv
GS-GSA-MW-3	8/4/2020 15:16	рН	6.06	рН
GS-GSA-MW-3	8/4/2020 15:16	Temperature	21.55	C
GS-GSA-MW-3	8/4/2020 15:16			NTU
GS-GSA-MW-3	8/4/2020 15:21	Conductivity	4343.16	uS/cm
GS-GSA-MW-3	8/4/2020 15:21	DO	0.15	mg/L
GS-GSA-MW-3	8/4/2020 15:21	Depth to Water Detail	107.54	_
GS-GSA-MW-3	8/4/2020 15:21	Oxidation Reduction Potention	-31.36	mv
GS-GSA-MW-3	8/4/2020 15:21	рН	6.07	
GS-GSA-MW-3	8/4/2020 15:21	*	21.24	•
GS-GSA-MW-3	8/4/2020 15:21	*		NTU
GS-GSA-MW-3	8/4/2020 15:26		4308.5	uS/cm
GS-GSA-MW-3	8/4/2020 15:26	-	0.15	mg/L
GS-GSA-MW-3	8/4/2020 15:26	Depth to Water Detail	107.54	
GS-GSA-MW-3		Oxidation Reduction Potention	-31.83	mv
GS-GSA-MW-3	8/4/2020 15:26		6.08	
GS-GSA-MW-3	8/4/2020 15:26	*	21.4	•

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3	8/4/2020 15:26	Turbidity	8.26	NTU
GS-GSA-MW-3	8/4/2020 15:31	Conductivity	4345.17	uS/cm
GS-GSA-MW-3	8/4/2020 15:31	DO	0.15	mg/L
GS-GSA-MW-3	8/4/2020 15:31	Depth to Water Detail	107.54	ft
GS-GSA-MW-3	8/4/2020 15:31	Oxidation Reduction Potention	-31.98	mv
GS-GSA-MW-3	8/4/2020 15:31	рН	6.09	рН
GS-GSA-MW-3	8/4/2020 15:31	Temperature	21.3	С
GS-GSA-MW-3	8/4/2020 15:31	Turbidity	8.88	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3V	8/4/2020 12:28	Conductivity	3963.46	uS/cm
GS-GSA-MW-3V	8/4/2020 12:28	DO	2.18	mg/L
GS-GSA-MW-3V	8/4/2020 12:28	Depth to Water Detail	127.56	ft
GS-GSA-MW-3V		Oxidation Reduction Potention	-99.15	mv
GS-GSA-MW-3V	8/4/2020 12:28	рН	6.34	рН
GS-GSA-MW-3V	8/4/2020 12:28	Temperature	24.97	С
GS-GSA-MW-3V	8/4/2020 12:28	Turbidity	3.36	NTU
GS-GSA-MW-3V	8/4/2020 12:33	Conductivity	3977.93	uS/cm
GS-GSA-MW-3V	8/4/2020 12:33		0.88	mg/L
GS-GSA-MW-3V	8/4/2020 12:33	Depth to Water Detail	128	ft
GS-GSA-MW-3V		Oxidation Reduction Potention	-51.25	mv
GS-GSA-MW-3V	8/4/2020 12:33	рН	6.02	рН
GS-GSA-MW-3V	8/4/2020 12:33	Temperature	24.8	C
GS-GSA-MW-3V	8/4/2020 12:33		5.32	NTU
GS-GSA-MW-3V	8/4/2020 12:38	Conductivity	3892.37	uS/cm
GS-GSA-MW-3V	8/4/2020 12:38	Ţ	0.68	mg/L
GS-GSA-MW-3V	8/4/2020 12:38	Depth to Water Detail	128.33	ft
GS-GSA-MW-3V		Oxidation Reduction Potention	-30.61	mv
GS-GSA-MW-3V	8/4/2020 12:38	рН	5.92	рН
GS-GSA-MW-3V	8/4/2020 12:38		25.11	
GS-GSA-MW-3V	8/4/2020 12:38		2.8	NTU
GS-GSA-MW-3V	8/4/2020 12:43	·	3820.4	uS/cm
GS-GSA-MW-3V	8/4/2020 12:43		0.62	mg/L
GS-GSA-MW-3V	8/4/2020 12:43	Depth to Water Detail	128.61	
GS-GSA-MW-3V		Oxidation Reduction Potention	-19.88	mv
GS-GSA-MW-3V	8/4/2020 12:43		5.89	рН
GS-GSA-MW-3V	8/4/2020 12:43	Temperature	24.69	C
GS-GSA-MW-3V	8/4/2020 12:43		2.75	NTU
GS-GSA-MW-3V	8/4/2020 12:48	Conductivity	3811.35	uS/cm
GS-GSA-MW-3V	8/4/2020 12:48		0.62	mg/L
GS-GSA-MW-3V	8/4/2020 12:48	Depth to Water Detail	128.76	
GS-GSA-MW-3V	8/4/2020 12:48	Oxidation Reduction Potention	-13.87	mv
GS-GSA-MW-3V	8/4/2020 12:48	рН	5.88	рН
GS-GSA-MW-3V	8/4/2020 12:48	Temperature	24.85	C
GS-GSA-MW-3V	8/4/2020 12:48	Turbidity	1.34	NTU
GS-GSA-MW-3V	8/4/2020 12:53	Conductivity	3805.29	uS/cm
GS-GSA-MW-3V	8/4/2020 12:53		0.61	mg/L
GS-GSA-MW-3V		Depth to Water Detail	128.94	ft
GS-GSA-MW-3V		Oxidation Reduction Potention	-10.86	mv
GS-GSA-MW-3V	8/4/2020 12:53		5.88	
GS-GSA-MW-3V	8/4/2020 12:53	*	24.72	
GS-GSA-MW-3V	8/4/2020 12:53	*	_	NTU
GS-GSA-MW-3V	8/4/2020 12:58	-	3805.18	uS/cm
GS-GSA-MW-3V	8/4/2020 12:58	DO	0.62	mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3V	8/4/2020 12:58	Depth to Water Detail	128.98	ft
GS-GSA-MW-3V	8/4/2020 12:58	Oxidation Reduction Potention	-10.43	mv
GS-GSA-MW-3V	8/4/2020 12:58	рН	5.9	рН
GS-GSA-MW-3V	8/4/2020 12:58	Temperature	25.2	С
GS-GSA-MW-3V	8/4/2020 12:58	Turbidity	1.01	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8	8/5/2020 11:06	Conductivity	3568.06	uS/cm
GS-GSA-MW-8	8/5/2020 11:06	DO	0.34	mg/L
GS-GSA-MW-8	8/5/2020 11:06	Depth to Water Detail	81.51	ft
GS-GSA-MW-8	8/5/2020 11:06	Oxidation Reduction Potention	-110.9	mv
GS-GSA-MW-8	8/5/2020 11:06	рН	6.73	pН
GS-GSA-MW-8	8/5/2020 11:06	Temperature	22.6	С
GS-GSA-MW-8	8/5/2020 11:06	Turbidity	3.51	NTU
GS-GSA-MW-8	8/5/2020 11:11	Conductivity	3607.71	uS/cm
GS-GSA-MW-8	8/5/2020 11:11	DO	0.25	mg/L
GS-GSA-MW-8	8/5/2020 11:11	Depth to Water Detail	81.61	ft
GS-GSA-MW-8	8/5/2020 11:11	Oxidation Reduction Potention	-110.39	mv
GS-GSA-MW-8	8/5/2020 11:11	рН	6.74	рН
GS-GSA-MW-8	8/5/2020 11:11	Temperature	22.15	С
GS-GSA-MW-8	8/5/2020 11:11	Turbidity	3.6	NTU
GS-GSA-MW-8	8/5/2020 11:16	Conductivity	3662.32	uS/cm
GS-GSA-MW-8	8/5/2020 11:16	DO	0.23	mg/L
GS-GSA-MW-8	8/5/2020 11:16	Depth to Water Detail	81.69	ft
GS-GSA-MW-8	8/5/2020 11:16	Oxidation Reduction Potention	-110.36	mv
GS-GSA-MW-8	8/5/2020 11:16	рН	6.75	pН
GS-GSA-MW-8	8/5/2020 11:16	Temperature	22.12	С
GS-GSA-MW-8	8/5/2020 11:16	Turbidity	3.33	NTU
GS-GSA-MW-8	8/5/2020 11:21	Conductivity	3686.49	uS/cm
GS-GSA-MW-8	8/5/2020 11:21	DO	0.22	mg/L
GS-GSA-MW-8	8/5/2020 11:21	Depth to Water Detail	81.74	
GS-GSA-MW-8	8/5/2020 11:21	Oxidation Reduction Potention	-110.97	mv
GS-GSA-MW-8	8/5/2020 11:21	рН	6.76	рН
GS-GSA-MW-8	8/5/2020 11:21	Temperature	22.37	С
GS-GSA-MW-8	8/5/2020 11:21	Turbidity	3.86	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	8/5/2020 8:06	Conductivity	1599.05	uS/cm
GS-GSA-MW-8V	8/5/2020 8:06	DO	0.58	mg/L
GS-GSA-MW-8V	8/5/2020 8:06	Depth to Water Detail	92.9	ft
GS-GSA-MW-8V	8/5/2020 8:06	Oxidation Reduction Potention	-174.73	mv
GS-GSA-MW-8V	8/5/2020 8:06	рН	7.69	рН
GS-GSA-MW-8V	8/5/2020 8:06	Temperature	21.52	С
GS-GSA-MW-8V	8/5/2020 8:06	Turbidity	3.46	NTU
GS-GSA-MW-8V	8/5/2020 8:11	Conductivity	1595.14	uS/cm
GS-GSA-MW-8V	8/5/2020 8:11	DO	0.44	mg/L
GS-GSA-MW-8V	8/5/2020 8:11	Depth to Water Detail	93.94	ft
GS-GSA-MW-8V	8/5/2020 8:11	Oxidation Reduction Potention	-200	mv
GS-GSA-MW-8V	8/5/2020 8:11	рН	7.71	рН
GS-GSA-MW-8V	8/5/2020 8:11	Temperature	21.5	С
GS-GSA-MW-8V	8/5/2020 8:11	Turbidity	1.71	NTU
GS-GSA-MW-8V	8/5/2020 8:16	Conductivity	1594.94	uS/cm
GS-GSA-MW-8V	8/5/2020 8:16	DO	0.41	mg/L
GS-GSA-MW-8V	8/5/2020 8:16	Depth to Water Detail	94.81	
GS-GSA-MW-8V		Oxidation Reduction Potention	-215.08	mv
GS-GSA-MW-8V	8/5/2020 8:16	рН	7.72	рН
GS-GSA-MW-8V	8/5/2020 8:16	Temperature	21.61	
GS-GSA-MW-8V	8/5/2020 8:16	Turbidity	1.64	NTU
GS-GSA-MW-8V	8/5/2020 8:21		1594.57	uS/cm
GS-GSA-MW-8V	8/5/2020 8:21	DO	0.39	mg/L
GS-GSA-MW-8V	8/5/2020 8:21	Depth to Water Detail	95.56	
GS-GSA-MW-8V		Oxidation Reduction Potention	-223.92	mv
GS-GSA-MW-8V	8/5/2020 8:21	рН	7.73	рН
GS-GSA-MW-8V	8/5/2020 8:21	Temperature	21.76	C
GS-GSA-MW-8V	8/5/2020 8:21	Turbidity	1.65	NTU
GS-GSA-MW-8V	8/5/2020 8:26	Conductivity	1590.7	uS/cm
GS-GSA-MW-8V	8/5/2020 8:26	DO	0.38	mg/L
GS-GSA-MW-8V		Depth to Water Detail	96.32	
GS-GSA-MW-8V		Oxidation Reduction Potention	-228.77	mv
GS-GSA-MW-8V	8/5/2020 8:26	рН	7.73	рН
GS-GSA-MW-8V	8/5/2020 8:26	Temperature	21.62	•
GS-GSA-MW-8V	8/5/2020 8:26		_	NTU
GS-GSA-MW-8V	8/5/2020 8:31	·	1601.94	uS/cm
GS-GSA-MW-8V	8/5/2020 8:31	· · · · · · · · · · · · · · · · · · ·	0.37	mg/L
GS-GSA-MW-8V		Depth to Water Detail	96.87	_
GS-GSA-MW-8V		Oxidation Reduction Potention	-231.56	
GS-GSA-MW-8V	8/5/2020 8:31		7.74	
GS-GSA-MW-8V	8/5/2020 8:31	1	21.65	•
GS-GSA-MW-8V	8/5/2020 8:31	_		NTU
GS-GSA-MW-8V	8/5/2020 8:36	·	1604.86	
GS-GSA-MW-8V	8/5/2020 8:36	·		mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	8/5/2020 8:36	Depth to Water Detail	97.56	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-232.81	
GS-GSA-MW-8V	8/5/2020 8:36	рН	7.74	рН
GS-GSA-MW-8V	8/5/2020 8:36	Temperature	21.75	С
GS-GSA-MW-8V	8/5/2020 8:36	Turbidity	1.45	NTU
GS-GSA-MW-8V	8/5/2020 8:41	Conductivity	1609.18	uS/cm
GS-GSA-MW-8V	8/5/2020 8:41	DO	0.36	mg/L
GS-GSA-MW-8V	8/5/2020 8:41	Depth to Water Detail	98.02	ft
GS-GSA-MW-8V	8/5/2020 8:41	Oxidation Reduction Potention	-232.83	mv
GS-GSA-MW-8V	8/5/2020 8:41	рН	7.74	pН
GS-GSA-MW-8V	8/5/2020 8:41	Temperature	21.76	С
GS-GSA-MW-8V	8/5/2020 8:41	Turbidity	1.72	NTU
GS-GSA-MW-8V	8/5/2020 8:46	Conductivity	1610.12	uS/cm
GS-GSA-MW-8V	8/5/2020 8:46	DO	0.35	mg/L
GS-GSA-MW-8V	8/5/2020 8:46	Depth to Water Detail	98.63	ft
GS-GSA-MW-8V	8/5/2020 8:46	Oxidation Reduction Potention	-232.32	mv
GS-GSA-MW-8V	8/5/2020 8:46	рН	7.74	рН
GS-GSA-MW-8V	8/5/2020 8:46	Temperature	21.89	С
GS-GSA-MW-8V	8/5/2020 8:46	Turbidity		NTU
GS-GSA-MW-8V	8/5/2020 8:51	Conductivity	1606.86	uS/cm
GS-GSA-MW-8V	8/5/2020 8:51	DO	0.34	mg/L
GS-GSA-MW-8V	8/5/2020 8:51	Depth to Water Detail	99	ft
GS-GSA-MW-8V	8/5/2020 8:51	Oxidation Reduction Potention	-231.09	mv
GS-GSA-MW-8V	8/5/2020 8:51	рН	7.73	рН
GS-GSA-MW-8V	8/5/2020 8:51	Temperature	21.85	C
GS-GSA-MW-8V	8/5/2020 8:51	Turbidity	1.71	NTU
GS-GSA-MW-8V	8/5/2020 8:56	Conductivity	1607.15	uS/cm
GS-GSA-MW-8V	8/5/2020 8:56		0.35	mg/L
GS-GSA-MW-8V	8/5/2020 8:56	Depth to Water Detail	99.48	
GS-GSA-MW-8V	8/5/2020 8:56	Oxidation Reduction Potention	-231.04	mv
GS-GSA-MW-8V	8/5/2020 8:56	рН	7.74	рН
GS-GSA-MW-8V	8/5/2020 8:56	Temperature	21.83	C
GS-GSA-MW-8V	8/5/2020 8:56	Turbidity	1.79	NTU
GS-GSA-MW-8V	8/5/2020 9:01	Conductivity	1605.22	uS/cm
GS-GSA-MW-8V	8/5/2020 9:01	DO	0.34	mg/L
GS-GSA-MW-8V	8/5/2020 9:01	Depth to Water Detail	99.97	ft
GS-GSA-MW-8V	8/5/2020 9:01	Oxidation Reduction Potention	-231.17	mv
GS-GSA-MW-8V	8/5/2020 9:01	pH	7.74	1
GS-GSA-MW-8V	8/5/2020 9:01	Temperature	21.8	С
GS-GSA-MW-8V	8/5/2020 9:01	· ·	1.74	NTU
GS-GSA-MW-8V	8/5/2020 9:06	Conductivity	1600.7	uS/cm
GS-GSA-MW-8V	8/5/2020 9:06	DO	0.33	mg/L
GS-GSA-MW-8V	8/5/2020 9:06	Depth to Water Detail	100.36	ft
GS-GSA-MW-8V	8/5/2020 9:06	Oxidation Reduction Potention	-230.96	mv

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	8/5/2020 9:06	рН	7.74	рН
GS-GSA-MW-8V	8/5/2020 9:06	Temperature	21.86	С
GS-GSA-MW-8V	8/5/2020 9:06	Turbidity	1.39	NTU
GS-GSA-MW-8V	8/5/2020 9:11	Conductivity	1597.89	uS/cm
GS-GSA-MW-8V	8/5/2020 9:11	DO	0.33	mg/L
GS-GSA-MW-8V	8/5/2020 9:11	Depth to Water Detail	100.81	ft
GS-GSA-MW-8V	8/5/2020 9:11	Oxidation Reduction Potention	-231.2	mv
GS-GSA-MW-8V	8/5/2020 9:11	рН	7.74	рН
GS-GSA-MW-8V	8/5/2020 9:11	Temperature	21.96	C
GS-GSA-MW-8V	8/5/2020 9:11	Turbidity	1.78	NTU
GS-GSA-MW-8V	8/5/2020 9:16	Conductivity	1592.08	uS/cm
GS-GSA-MW-8V	8/5/2020 9:16		0.32	mg/L
GS-GSA-MW-8V	8/5/2020 9:16	Depth to Water Detail	101.12	
GS-GSA-MW-8V		Oxidation Reduction Potention	-230.89	mv
GS-GSA-MW-8V	8/5/2020 9:16		7.73	
GS-GSA-MW-8V	8/5/2020 9:16	1	22.28	•
GS-GSA-MW-8V	8/5/2020 9:16			NTU
GS-GSA-MW-8V	8/5/2020 9:21		1590.68	
GS-GSA-MW-8V	8/5/2020 9:21	·		mg/L
GS-GSA-MW-8V		Depth to Water Detail	101.46	
GS-GSA-MW-8V		Oxidation Reduction Potention	-232.91	
GS-GSA-MW-8V	8/5/2020 9:21		7.72	
GS-GSA-MW-8V	8/5/2020 9:21		21.98	•
GS-GSA-MW-8V	8/5/2020 9:21			NTU
GS-GSA-MW-8V	8/5/2020 9:26		1587.53	
GS-GSA-MW-8V	8/5/2020 9:26	-		mg/L
GS-GSA-MW-8V		Depth to Water Detail	101.83	_
GS-GSA-MW-8V		Oxidation Reduction Potention	-240.86	
GS-GSA-MW-8V	8/5/2020 9:26		7.69	
GS-GSA-MW-8V	8/5/2020 9:26		22.08	C
GS-GSA-MW-8V	8/5/2020 9:26			NTU
GS-GSA-MW-8V	8/5/2020 9:31	,	1587.77	
GS-GSA-MW-8V	8/5/2020 9:31	<u> </u>		mg/L
GS-GSA-MW-8V		Depth to Water Detail	102.19	
GS-GSA-MW-8V		Oxidation Reduction Potention	-249.89	mv
GS-GSA-MW-8V	8/5/2020 9:31	Н	7.67	
GS-GSA-MW-8V	8/5/2020 9:31	1	22.08	1
GS-GSA-MW-8V	8/5/2020 9:31	~		NTU
GS-GSA-MW-8V	8/5/2020 9:36	·	1589.93	
GS-GSA-MW-8V	8/5/2020 9:36	,		mg/L
GS-GSA-MW-8V		Depth to Water Detail	102.41	
GS-GSA-MW-8V		Oxidation Reduction Potention	-257.41	
GS-GSA-MW-8V	8/5/2020 9:36		7.66	
GS-GSA-MW-8V	8/5/2020 9:36	*	22.15	•

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	8/5/2020 9:36	Turbidity	1.76	NTU
GS-GSA-MW-8V	8/5/2020 9:41	Conductivity	1595.74	uS/cm
GS-GSA-MW-8V	8/5/2020 9:41	DO	0.26	mg/L
GS-GSA-MW-8V	8/5/2020 9:41	Depth to Water Detail	102.71	ft
GS-GSA-MW-8V	8/5/2020 9:41	Oxidation Reduction Potention	-262.29	mv
GS-GSA-MW-8V	8/5/2020 9:41	рН	7.61	рН
GS-GSA-MW-8V	8/5/2020 9:41	Temperature	22.4	С
GS-GSA-MW-8V	8/5/2020 9:41	Turbidity	1.82	NTU
GS-GSA-MW-8V	8/5/2020 9:46	Conductivity	1596.39	uS/cm
GS-GSA-MW-8V	8/5/2020 9:46	DO	0.24	mg/L
GS-GSA-MW-8V	8/5/2020 9:46	Depth to Water Detail	102.94	ft
GS-GSA-MW-8V		Oxidation Reduction Potention	-267.72	mv
GS-GSA-MW-8V	8/5/2020 9:46	рН	7.62	рН
GS-GSA-MW-8V	8/5/2020 9:46	Temperature	22.03	С
GS-GSA-MW-8V	8/5/2020 9:46		1.74	NTU
GS-GSA-MW-8V	8/5/2020 9:51	Conductivity	1607.56	uS/cm
GS-GSA-MW-8V	8/5/2020 9:51	DO	0.24	mg/L
GS-GSA-MW-8V	8/5/2020 9:51	Depth to Water Detail	103.28	
GS-GSA-MW-8V		Oxidation Reduction Potention	-272.49	mv
GS-GSA-MW-8V	8/5/2020 9:51	рН	7.61	рН
GS-GSA-MW-8V	8/5/2020 9:51	Temperature	22.14	C
GS-GSA-MW-8V	8/5/2020 9:51		1.72	NTU
GS-GSA-MW-8V	8/5/2020 9:56	Conductivity	1613.76	uS/cm
GS-GSA-MW-8V	8/5/2020 9:56	-	0.23	mg/L
GS-GSA-MW-8V	8/5/2020 9:56	Depth to Water Detail	103.54	
GS-GSA-MW-8V	8/5/2020 9:56	Oxidation Reduction Potention	-276	mv
GS-GSA-MW-8V	8/5/2020 9:56	рН	7.61	рН
GS-GSA-MW-8V	8/5/2020 9:56	Temperature	22.4	С
GS-GSA-MW-8V	8/5/2020 9:56		1.63	NTU
GS-GSA-MW-8V	8/5/2020 10:01	Conductivity	1619.33	uS/cm
GS-GSA-MW-8V	8/5/2020 10:01		+	mg/L
GS-GSA-MW-8V	8/5/2020 10:01	Depth to Water Detail	103.68	ft
GS-GSA-MW-8V	8/5/2020 10:01	Oxidation Reduction Potention	-278.6	mv
GS-GSA-MW-8V	8/5/2020 10:01	рН	7.61	
GS-GSA-MW-8V	8/5/2020 10:01	Temperature	22.66	C
GS-GSA-MW-8V	8/5/2020 10:01			NTU
GS-GSA-MW-8V	8/5/2020 10:06	Conductivity	1624.58	uS/cm
GS-GSA-MW-8V	8/5/2020 10:06		0.23	mg/L
GS-GSA-MW-8V	8/5/2020 10:06	Depth to Water Detail	103.86	ŭ
GS-GSA-MW-8V		Oxidation Reduction Potention	-280.53	
GS-GSA-MW-8V	8/5/2020 10:06		7.59	
GS-GSA-MW-8V	8/5/2020 10:06		22.65	•
GS-GSA-MW-8V	8/5/2020 10:06	*		NTU
GS-GSA-MW-8V	8/5/2020 10:11		1623.09	

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	8/5/2020 10:11	DO	0.21	mg/L
GS-GSA-MW-8V	8/5/2020 10:11	Depth to Water Detail	104.02	ft
GS-GSA-MW-8V	8/5/2020 10:11	Oxidation Reduction Potention	-282.08	mv
GS-GSA-MW-8V	8/5/2020 10:11	рН	7.58	рН
GS-GSA-MW-8V	8/5/2020 10:11	Temperature	22.53	C
GS-GSA-MW-8V	8/5/2020 10:11	Turbidity	1.58	NTU
GS-GSA-MW-8V	8/5/2020 10:16	Conductivity	1635.82	uS/cm
GS-GSA-MW-8V	8/5/2020 10:16	DO	0.21	mg/L
GS-GSA-MW-8V	8/5/2020 10:16	Depth to Water Detail	104.14	ft
GS-GSA-MW-8V	8/5/2020 10:16	Oxidation Reduction Potention	-284.84	mv
GS-GSA-MW-8V	8/5/2020 10:16	рН	7.58	рН
GS-GSA-MW-8V	8/5/2020 10:16	Temperature	22.32	С
GS-GSA-MW-8V	8/5/2020 10:16	Turbidity	1.62	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-12H	8/5/2020 12:01	Conductivity	1430.36	uS/cm
GS-GSA-MW-12H	8/5/2020 12:01	DO	0.69	mg/L
GS-GSA-MW-12H	8/5/2020 12:01	Depth to Water Detail	63.3	ft
GS-GSA-MW-12H	8/5/2020 12:01	Oxidation Reduction Potention	271.29	mv
GS-GSA-MW-12H	8/5/2020 12:01	рН	4.38	рН
GS-GSA-MW-12H	8/5/2020 12:01	Temperature	20.4	С
GS-GSA-MW-12H	8/5/2020 12:01	Turbidity	78.6	NTU
GS-GSA-MW-12H	8/5/2020 12:06	Conductivity	1409.49	uS/cm
GS-GSA-MW-12H	8/5/2020 12:06	DO	0.35	mg/L
GS-GSA-MW-12H	8/5/2020 12:06	Depth to Water Detail	63.3	ft
GS-GSA-MW-12H	8/5/2020 12:06	Oxidation Reduction Potention	298.45	mv
GS-GSA-MW-12H	8/5/2020 12:06	рН	4.19	рН
GS-GSA-MW-12H	8/5/2020 12:06	Temperature	20.59	С
GS-GSA-MW-12H	8/5/2020 12:06	Turbidity	32.4	NTU
GS-GSA-MW-12H	8/5/2020 12:11	Conductivity	1401.93	uS/cm
GS-GSA-MW-12H	8/5/2020 12:11	DO	0.29	mg/L
GS-GSA-MW-12H	8/5/2020 12:11	Depth to Water Detail	63.3	
GS-GSA-MW-12H		Oxidation Reduction Potention	314.52	mv
GS-GSA-MW-12H	8/5/2020 12:11	рН	4.15	рН
GS-GSA-MW-12H	8/5/2020 12:11	Temperature	20.49	С
GS-GSA-MW-12H	8/5/2020 12:11	Turbidity	20.1	NTU
GS-GSA-MW-12H	8/5/2020 12:16	Conductivity	1404.25	uS/cm
GS-GSA-MW-12H	8/5/2020 12:16	DO	0.24	mg/L
GS-GSA-MW-12H	8/5/2020 12:16	Depth to Water Detail	63.3	ft
GS-GSA-MW-12H		Oxidation Reduction Potention	324.13	mv
GS-GSA-MW-12H	8/5/2020 12:16	рН	4.12	рН
GS-GSA-MW-12H	8/5/2020 12:16	Temperature	20.62	С
GS-GSA-MW-12H	8/5/2020 12:16	Turbidity	14.7	NTU
GS-GSA-MW-12H	8/5/2020 12:21	Conductivity	1376.56	uS/cm
GS-GSA-MW-12H	8/5/2020 12:21	DO	0.23	mg/L
GS-GSA-MW-12H	8/5/2020 12:21	Depth to Water Detail	63.3	
GS-GSA-MW-12H	8/5/2020 12:21	Oxidation Reduction Potention	330.23	mv
GS-GSA-MW-12H	8/5/2020 12:21	рН	4.12	рН
GS-GSA-MW-12H	8/5/2020 12:21	Temperature	20.51	С
GS-GSA-MW-12H	8/5/2020 12:21	Turbidity	12.8	NTU
GS-GSA-MW-12H	8/5/2020 12:26	Conductivity	1354	uS/cm
GS-GSA-MW-12H	8/5/2020 12:26	DO	0.23	mg/L
GS-GSA-MW-12H	8/5/2020 12:26	Depth to Water Detail	63.3	ft
GS-GSA-MW-12H	8/5/2020 12:26	Oxidation Reduction Potention	335.46	mv
GS-GSA-MW-12H	8/5/2020 12:26	рН	4.11	рН
GS-GSA-MW-12H	8/5/2020 12:26	Temperature	20.52	
GS-GSA-MW-12H	8/5/2020 12:26	Turbidity	12.11	NTU
GS-GSA-MW-12H	8/5/2020 12:31	Conductivity	1355.52	uS/cm
GS-GSA-MW-12H	8/5/2020 12:31	DO	0.22	mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-12H	8/5/2020 12:31	Depth to Water Detail	63.3	ft
GS-GSA-MW-12H	8/5/2020 12:31	Oxidation Reduction Potention	340.11	mv
GS-GSA-MW-12H	8/5/2020 12:31	pН	4.12	pН
GS-GSA-MW-12H	8/5/2020 12:31	Temperature	20.52	С
GS-GSA-MW-12H	8/5/2020 12:31	Turbidity	12.4	NTU
GS-GSA-MW-12H	8/5/2020 12:36	Conductivity	1330.34	uS/cm
GS-GSA-MW-12H	8/5/2020 12:36	DO	0.23	mg/L
GS-GSA-MW-12H	8/5/2020 12:36	Depth to Water Detail	63.3	ft
GS-GSA-MW-12H	8/5/2020 12:36	Oxidation Reduction Potention	342.82	mv
GS-GSA-MW-12H	8/5/2020 12:36	pН	4.12	pН
GS-GSA-MW-12H	8/5/2020 12:36	Temperature	20.35	С
GS-GSA-MW-12H	8/5/2020 12:36	Turbidity	9.15	NTU
GS-GSA-MW-12H	8/5/2020 12:41	Conductivity	1325.68	uS/cm
GS-GSA-MW-12H	8/5/2020 12:41	DO	0.23	mg/L
GS-GSA-MW-12H		Depth to Water Detail	63.3	ft
GS-GSA-MW-12H	8/5/2020 12:41	Oxidation Reduction Potention	346.68	mv
GS-GSA-MW-12H	8/5/2020 12:41	рН	4.13	pН
GS-GSA-MW-12H	8/5/2020 12:41	Temperature	20.35	
GS-GSA-MW-12H	8/5/2020 12:41	Turbidity	8.9	NTU
GS-GSA-MW-12H	8/5/2020 12:46	Conductivity	1325.81	uS/cm
GS-GSA-MW-12H	8/5/2020 12:46	DO	0.23	mg/L
GS-GSA-MW-12H	8/5/2020 12:46	Depth to Water Detail	63.3	ft
GS-GSA-MW-12H	8/5/2020 12:46	Oxidation Reduction Potention	349.81	mv
GS-GSA-MW-12H	8/5/2020 12:46	рН	4.13	pН
GS-GSA-MW-12H	8/5/2020 12:46	Temperature	20.32	С
GS-GSA-MW-12H	8/5/2020 12:46	Turbidity	7.94	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-12V	8/5/2020 13:28	Conductivity	3709.03	uS/cm
GS-GSA-MW-12V	8/5/2020 13:28	DO	0.31	mg/L
GS-GSA-MW-12V	8/5/2020 13:28	Depth to Water Detail	67.16	ft
GS-GSA-MW-12V	8/5/2020 13:28	Oxidation Reduction Potention	-40.14	mv
GS-GSA-MW-12V	8/5/2020 13:28	рН	6.2	pН
GS-GSA-MW-12V	8/5/2020 13:28	Temperature	20.35	С
GS-GSA-MW-12V	8/5/2020 13:28	Turbidity	17.2	NTU
GS-GSA-MW-12V	8/5/2020 13:33	Conductivity	3655.37	uS/cm
GS-GSA-MW-12V	8/5/2020 13:33	DO	0.21	mg/L
GS-GSA-MW-12V	8/5/2020 13:33	Depth to Water Detail	67.34	ft
GS-GSA-MW-12V	8/5/2020 13:33	Oxidation Reduction Potention	-41.66	mv
GS-GSA-MW-12V	8/5/2020 13:33	рН	6.15	рН
GS-GSA-MW-12V	8/5/2020 13:33	Temperature	20.27	С
GS-GSA-MW-12V	8/5/2020 13:33	Turbidity	10.29	NTU
GS-GSA-MW-12V	8/5/2020 13:38	Conductivity	3621.63	uS/cm
GS-GSA-MW-12V	8/5/2020 13:38	DO	0.19	mg/L
GS-GSA-MW-12V	8/5/2020 13:38	Depth to Water Detail	67.4	ft
GS-GSA-MW-12V	8/5/2020 13:38	Oxidation Reduction Potention	-41.64	mv
GS-GSA-MW-12V	8/5/2020 13:38	рН	6.14	рН
GS-GSA-MW-12V	8/5/2020 13:38	Temperature	20.28	С
GS-GSA-MW-12V	8/5/2020 13:38	Turbidity	7.4	NTU
GS-GSA-MW-12V	8/5/2020 13:43	Conductivity	3604.38	uS/cm
GS-GSA-MW-12V	8/5/2020 13:43	DO	0.19	mg/L
GS-GSA-MW-12V	8/5/2020 13:43	Depth to Water Detail	67.46	
GS-GSA-MW-12V	8/5/2020 13:43	Oxidation Reduction Potention	-42.27	mv
GS-GSA-MW-12V	8/5/2020 13:43	рН	6.15	рН
GS-GSA-MW-12V	8/5/2020 13:43	Temperature	20.1	
GS-GSA-MW-12V	8/5/2020 13:43		6.84	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-17	8/4/2020 10:57	Conductivity	1880.94	uS/cm
GS-GSA-PZ-17	8/4/2020 10:57	DO	0.87	mg/L
GS-GSA-PZ-17	8/4/2020 10:57	Depth to Water Detail	46.4	ft
GS-GSA-PZ-17	8/4/2020 10:57	Oxidation Reduction Potention	272.84	mv
GS-GSA-PZ-17	8/4/2020 10:57	рН	4.14	pН
GS-GSA-PZ-17	8/4/2020 10:57	Temperature	24.06	С
GS-GSA-PZ-17	8/4/2020 10:57	Turbidity	12.71	NTU
GS-GSA-PZ-17	8/4/2020 11:02	Conductivity	1878.01	uS/cm
GS-GSA-PZ-17	8/4/2020 11:02	DO	0.62	mg/L
GS-GSA-PZ-17	8/4/2020 11:02	Depth to Water Detail	46.41	ft
GS-GSA-PZ-17	8/4/2020 11:02	Oxidation Reduction Potention	279.05	mv
GS-GSA-PZ-17	8/4/2020 11:02	рН	4.13	рН
GS-GSA-PZ-17	8/4/2020 11:02	Temperature	23.53	С
GS-GSA-PZ-17	8/4/2020 11:02	Turbidity	8.94	NTU
GS-GSA-PZ-17	8/4/2020 11:07	Conductivity	1868.79	uS/cm
GS-GSA-PZ-17	8/4/2020 11:07	DO	0.49	mg/L
GS-GSA-PZ-17	8/4/2020 11:07	Depth to Water Detail	46.42	ft
GS-GSA-PZ-17	8/4/2020 11:07	Oxidation Reduction Potention	283.9	mv
GS-GSA-PZ-17	8/4/2020 11:07	рН	4.13	рН
GS-GSA-PZ-17	8/4/2020 11:07	Temperature	23.67	С
GS-GSA-PZ-17	8/4/2020 11:07	Turbidity	9.08	NTU
GS-GSA-PZ-17	8/4/2020 11:12	Conductivity	1879.11	uS/cm
GS-GSA-PZ-17	8/4/2020 11:12	DO	0.43	mg/L
GS-GSA-PZ-17	8/4/2020 11:12	Depth to Water Detail	46.43	ft
GS-GSA-PZ-17	8/4/2020 11:12	Oxidation Reduction Potention	287.26	mv
GS-GSA-PZ-17	8/4/2020 11:12	рН	4.09	рН
GS-GSA-PZ-17	8/4/2020 11:12	Temperature	23.47	С
GS-GSA-PZ-17	8/4/2020 11:12	Turbidity	6.82	NTU
GS-GSA-PZ-17	8/4/2020 11:17	Conductivity	1883.1	uS/cm
GS-GSA-PZ-17	8/4/2020 11:17	DO	0.38	mg/L
GS-GSA-PZ-17	8/4/2020 11:17	Depth to Water Detail	46.44	
GS-GSA-PZ-17	8/4/2020 11:17	Oxidation Reduction Potention	288.29	mv
GS-GSA-PZ-17	8/4/2020 11:17	рН	4.08	рН
GS-GSA-PZ-17	8/4/2020 11:17	Temperature	23.57	С
GS-GSA-PZ-17	8/4/2020 11:17	Turbidity	5.56	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-18	8/3/2020 10:36	Conductivity	1312.16	uS/cm
GS-GSA-PZ-18	8/3/2020 10:36		0.89	mg/L
GS-GSA-PZ-18	8/3/2020 10:36	Depth to Water Detail	65.14	ft
GS-GSA-PZ-18	8/3/2020 10:36	Oxidation Reduction Potention	241.97	mv
GS-GSA-PZ-18	8/3/2020 10:36	рН	4.09	рН
GS-GSA-PZ-18	8/3/2020 10:36	Temperature	20.84	С
GS-GSA-PZ-18	8/3/2020 10:36	Turbidity	1.32	NTU
GS-GSA-PZ-18	8/3/2020 10:41	Conductivity	1296.58	uS/cm
GS-GSA-PZ-18	8/3/2020 10:41		0.68	mg/L
GS-GSA-PZ-18	8/3/2020 10:41	Depth to Water Detail	65.52	ft
GS-GSA-PZ-18		Oxidation Reduction Potention	243.92	mv
GS-GSA-PZ-18	8/3/2020 10:41	рН	4.09	рН
GS-GSA-PZ-18	8/3/2020 10:41	Temperature	20.84	С
GS-GSA-PZ-18	8/3/2020 10:41	Turbidity	0.85	NTU
GS-GSA-PZ-18	8/3/2020 10:46	Conductivity	1309.05	uS/cm
GS-GSA-PZ-18	8/3/2020 10:46	DO		mg/L
GS-GSA-PZ-18	8/3/2020 10:46	Depth to Water Detail	65.75	ft
GS-GSA-PZ-18	8/3/2020 10:46	Oxidation Reduction Potention	244.82	mv
GS-GSA-PZ-18	8/3/2020 10:46	рН	4.09	рН
GS-GSA-PZ-18	8/3/2020 10:46	Temperature	20.8	С
GS-GSA-PZ-18	8/3/2020 10:46	Turbidity	1	NTU
GS-GSA-PZ-18	8/3/2020 10:51	Conductivity	1300.33	uS/cm
GS-GSA-PZ-18	8/3/2020 10:51	DO	0.65	mg/L
GS-GSA-PZ-18	8/3/2020 10:51	Depth to Water Detail	65.76	ft
GS-GSA-PZ-18	8/3/2020 10:51	Oxidation Reduction Potention	251.42	mv
GS-GSA-PZ-18	8/3/2020 10:51	рН	4.09	
GS-GSA-PZ-18	8/3/2020 10:51	Temperature	22.72	С
GS-GSA-PZ-18	8/3/2020 10:51	Turbidity	0.82	NTU
GS-GSA-PZ-18	8/3/2020 10:56	Conductivity	1297.6	uS/cm
GS-GSA-PZ-18	8/3/2020 10:56	DO	0.7	mg/L
GS-GSA-PZ-18		Depth to Water Detail	65.76	
GS-GSA-PZ-18	8/3/2020 10:56	Oxidation Reduction Potention	250.58	mv
GS-GSA-PZ-18	8/3/2020 10:56	рН	4.09	рН
GS-GSA-PZ-18	8/3/2020 10:56	Temperature	21.91	С
GS-GSA-PZ-18	8/3/2020 10:56	Turbidity	0.86	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-19	8/3/2020 12:21	Conductivity	1533.69	uS/cm
GS-GSA-PZ-19	8/3/2020 12:21	DO	0.3	mg/L
GS-GSA-PZ-19	8/3/2020 12:21	Depth to Water Detail	125.61	ft
GS-GSA-PZ-19	8/3/2020 12:21	Oxidation Reduction Potention	-28.94	mv
GS-GSA-PZ-19	8/3/2020 12:21	рН	6.35	рН
GS-GSA-PZ-19	8/3/2020 12:21	Temperature	18.99	С
GS-GSA-PZ-19	8/3/2020 12:21	Turbidity	12.2	NTU
GS-GSA-PZ-19	8/3/2020 12:26	Conductivity	1287.97	uS/cm
GS-GSA-PZ-19	8/3/2020 12:26	DO	0.23	mg/L
GS-GSA-PZ-19	8/3/2020 12:26	Depth to Water Detail	125.96	ft
GS-GSA-PZ-19	8/3/2020 12:26	Oxidation Reduction Potention	-30.16	mv
GS-GSA-PZ-19	8/3/2020 12:26	рН	6.32	рН
GS-GSA-PZ-19	8/3/2020 12:26	Temperature	18.7	С
GS-GSA-PZ-19	8/3/2020 12:26	Turbidity	9.56	NTU
GS-GSA-PZ-19	8/3/2020 12:31	Conductivity	1237.18	uS/cm
GS-GSA-PZ-19	8/3/2020 12:31	DO	0.21	mg/L
GS-GSA-PZ-19	8/3/2020 12:31	Depth to Water Detail	126.25	ft
GS-GSA-PZ-19	8/3/2020 12:31	Oxidation Reduction Potention	-29.95	mv
GS-GSA-PZ-19	8/3/2020 12:31	рН	6.31	рН
GS-GSA-PZ-19	8/3/2020 12:31	Temperature	18.7	С
GS-GSA-PZ-19	8/3/2020 12:31	Turbidity	6.15	NTU
GS-GSA-PZ-19	8/3/2020 12:36	Conductivity	1201.39	uS/cm
GS-GSA-PZ-19	8/3/2020 12:36	DO	0.2	mg/L
GS-GSA-PZ-19	8/3/2020 12:36	Depth to Water Detail	126.51	ft
GS-GSA-PZ-19	8/3/2020 12:36	Oxidation Reduction Potention	-29.8	mv
GS-GSA-PZ-19	8/3/2020 12:36	рН	6.31	рН
GS-GSA-PZ-19	8/3/2020 12:36	Temperature	18.78	С
GS-GSA-PZ-19	8/3/2020 12:36	Turbidity	5.63	NTU
GS-GSA-PZ-19	8/3/2020 12:41	Conductivity	1150.01	uS/cm
GS-GSA-PZ-19	8/3/2020 12:41	DO	0.2	mg/L
GS-GSA-PZ-19	8/3/2020 12:41	Depth to Water Detail	126.63	
GS-GSA-PZ-19	8/3/2020 12:41	Oxidation Reduction Potention	-30.41	mv
GS-GSA-PZ-19	8/3/2020 12:41	рН	6.32	рН
GS-GSA-PZ-19	8/3/2020 12:41	Temperature	18.81	_
GS-GSA-PZ-19	8/3/2020 12:41	Turbidity	3.75	NTU
GS-GSA-PZ-19	8/3/2020 12:46	Conductivity	1176.09	uS/cm
GS-GSA-PZ-19	8/3/2020 12:46	·	0.2	mg/L
GS-GSA-PZ-19	8/3/2020 12:46	Depth to Water Detail	126.78	ft
GS-GSA-PZ-19	8/3/2020 12:46	Oxidation Reduction Potention	-30.67	
GS-GSA-PZ-19	8/3/2020 12:46	рН	6.32	рН
GS-GSA-PZ-19	8/3/2020 12:46	Temperature	18.97	
GS-GSA-PZ-19	8/3/2020 12:46	Turbidity	3.77	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-20	8/3/2020 13:40	Conductivity	1231.78	uS/cm
GS-GSA-PZ-20	8/3/2020 13:40	DO	0.42	mg/L
GS-GSA-PZ-20		Depth to Water Detail	116.74	ft
GS-GSA-PZ-20	8/3/2020 13:40	Oxidation Reduction Potention	3.52	mv
GS-GSA-PZ-20	8/3/2020 13:40	1	5.93	рН
GS-GSA-PZ-20	8/3/2020 13:40	Temperature	19.73	C
GS-GSA-PZ-20	8/3/2020 13:40		11.64	NTU
GS-GSA-PZ-20	8/3/2020 13:45	Conductivity	1222.06	uS/cm
GS-GSA-PZ-20	8/3/2020 13:45	DO		mg/L
GS-GSA-PZ-20	8/3/2020 13:45	Depth to Water Detail	116.74	ft
GS-GSA-PZ-20	8/3/2020 13:45	Oxidation Reduction Potention	0.43	mv
GS-GSA-PZ-20	8/3/2020 13:45	*	5.96	
GS-GSA-PZ-20	8/3/2020 13:45	Temperature	19.84	C
GS-GSA-PZ-20	8/3/2020 13:45	Turbidity	7.32	NTU
GS-GSA-PZ-20	8/3/2020 13:50	Conductivity	1202.22	uS/cm
GS-GSA-PZ-20	8/3/2020 13:50			mg/L
GS-GSA-PZ-20		Depth to Water Detail	116.74	ft
GS-GSA-PZ-20	8/3/2020 13:50	Oxidation Reduction Potention	-1.86	mv
GS-GSA-PZ-20	8/3/2020 13:50	4		pН
GS-GSA-PZ-20	8/3/2020 13:50	Temperature	19.67	C
GS-GSA-PZ-20	8/3/2020 13:50		5.32	NTU
GS-GSA-PZ-20	8/3/2020 13:55	Conductivity	1185.16	uS/cm
GS-GSA-PZ-20	8/3/2020 13:55	DO		mg/L
GS-GSA-PZ-20	8/3/2020 13:55	Depth to Water Detail	116.74	ft
GS-GSA-PZ-20	8/3/2020 13:55	Oxidation Reduction Potention	-3.01	mv
GS-GSA-PZ-20	8/3/2020 13:55		6.03	
GS-GSA-PZ-20	8/3/2020 13:55	Temperature	19.53	С
GS-GSA-PZ-20	8/3/2020 13:55	Turbidity	4.15	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-21	8/4/2020 8:09	Conductivity	763.14	uS/cm
GS-GSA-PZ-21	8/4/2020 8:09	DO	0.55	mg/L
GS-GSA-PZ-21	8/4/2020 8:09	Depth to Water Detail	84.08	
GS-GSA-PZ-21	8/4/2020 8:09	Oxidation Reduction Potention	-105.89	mv
GS-GSA-PZ-21	8/4/2020 8:09	рН	6.87	рН
GS-GSA-PZ-21	8/4/2020 8:09	Temperature	19.43	С
GS-GSA-PZ-21	8/4/2020 8:09	Turbidity	2.15	NTU
GS-GSA-PZ-21	8/4/2020 8:14	Conductivity	760.84	uS/cm
GS-GSA-PZ-21	8/4/2020 8:14	DO	0.37	mg/L
GS-GSA-PZ-21	8/4/2020 8:14	Depth to Water Detail	84.5	
GS-GSA-PZ-21	8/4/2020 8:14	Oxidation Reduction Potention	-104.13	mv
GS-GSA-PZ-21	8/4/2020 8:14	рН	6.9	рН
GS-GSA-PZ-21	8/4/2020 8:14	Temperature	19.32	C
GS-GSA-PZ-21	8/4/2020 8:14	•	1.46	NTU
GS-GSA-PZ-21	8/4/2020 8:19	Conductivity	760.87	uS/cm
GS-GSA-PZ-21	8/4/2020 8:19	· · · · · · · · · · · · · · · · · · ·	0.33	mg/L
GS-GSA-PZ-21	8/4/2020 8:19	Depth to Water Detail	84.79	ft
GS-GSA-PZ-21		Oxidation Reduction Potention	-101.35	mv
GS-GSA-PZ-21	8/4/2020 8:19	рН	6.92	рН
GS-GSA-PZ-21	8/4/2020 8:19	Temperature	19.22	C
GS-GSA-PZ-21	8/4/2020 8:19		1.28	NTU
GS-GSA-PZ-21	8/4/2020 8:24	·	762.12	uS/cm
GS-GSA-PZ-21	8/4/2020 8:24	<u> </u>	0.3	mg/L
GS-GSA-PZ-21	8/4/2020 8:24	Depth to Water Detail	85.08	
GS-GSA-PZ-21		Oxidation Reduction Potention	-99.29	mv
GS-GSA-PZ-21	8/4/2020 8:24		6.93	
GS-GSA-PZ-21	8/4/2020 8:24	Temperature	19.27	
GS-GSA-PZ-21	8/4/2020 8:24	Turbidity	1.17	NTU
GS-GSA-PZ-21	8/4/2020 8:29	Conductivity	762.11	uS/cm
GS-GSA-PZ-21	8/4/2020 8:29		0.29	mg/L
GS-GSA-PZ-21	8/4/2020 8:29	Depth to Water Detail	85.27	
GS-GSA-PZ-21	8/4/2020 8:29	Oxidation Reduction Potention	-97.63	mv
GS-GSA-PZ-21	8/4/2020 8:29	рН	6.94	рН
GS-GSA-PZ-21	8/4/2020 8:29	Temperature	19.36	_
GS-GSA-PZ-21	8/4/2020 8:29	Turbidity	1.24	NTU
GS-GSA-PZ-21	8/4/2020 8:34	·	762.75	uS/cm
GS-GSA-PZ-21	8/4/2020 8:34	· · · · · · · · · · · · · · · · · · ·	0.28	mg/L
GS-GSA-PZ-21	8/4/2020 8:34	Depth to Water Detail	85.43	_
GS-GSA-PZ-21		Oxidation Reduction Potention	-96.63	
GS-GSA-PZ-21	8/4/2020 8:34	рН	6.94	
GS-GSA-PZ-21	8/4/2020 8:34	1	19.41	
GS-GSA-PZ-21	8/4/2020 8:34			NTU
GS-GSA-PZ-21	8/4/2020 8:39	•		uS/cm
GS-GSA-PZ-21	8/4/2020 8:39			mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-21	8/4/2020 8:39	Depth to Water Detail	85.61	ft
GS-GSA-PZ-21	8/4/2020 8:39	Oxidation Reduction Potention	-94.94	mv
GS-GSA-PZ-21	8/4/2020 8:39	рН	6.93	pН
GS-GSA-PZ-21	8/4/2020 8:39	Temperature	19.48	С
GS-GSA-PZ-21	8/4/2020 8:39	Turbidity	1.95	NTU
GS-GSA-PZ-21	8/4/2020 8:44	Conductivity	761.14	uS/cm
GS-GSA-PZ-21	8/4/2020 8:44	DO	0.26	mg/L
GS-GSA-PZ-21	8/4/2020 8:44	Depth to Water Detail	85.75	ft
GS-GSA-PZ-21	8/4/2020 8:44	Oxidation Reduction Potention	-94.26	mv
GS-GSA-PZ-21	8/4/2020 8:44	рН	6.93	pН
GS-GSA-PZ-21	8/4/2020 8:44	Temperature	19.49	С
GS-GSA-PZ-21	8/4/2020 8:44	Turbidity	1.83	NTU
GS-GSA-PZ-21	8/4/2020 8:49	Conductivity	762.82	uS/cm
GS-GSA-PZ-21	8/4/2020 8:49	DO	0.26	mg/L
GS-GSA-PZ-21	8/4/2020 8:49	Depth to Water Detail	85.86	ft
GS-GSA-PZ-21	8/4/2020 8:49	Oxidation Reduction Potention	-93.39	mv
GS-GSA-PZ-21	8/4/2020 8:49	рН	6.94	pН
GS-GSA-PZ-21	8/4/2020 8:49	Temperature	19.38	С
GS-GSA-PZ-21	8/4/2020 8:49	Turbidity	1.86	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-22	8/4/2020 9:42	Conductivity	836.59	uS/cm
GS-GSA-PZ-22	8/4/2020 9:42		0.45	mg/L
GS-GSA-PZ-22	8/4/2020 9:42	Depth to Water Detail	56.45	ft
GS-GSA-PZ-22		Oxidation Reduction Potention	-90.64	mv
GS-GSA-PZ-22	8/4/2020 9:42	рН	6.41	pН
GS-GSA-PZ-22	8/4/2020 9:42	Temperature	18.87	С
GS-GSA-PZ-22	8/4/2020 9:42	Turbidity	4.53	NTU
GS-GSA-PZ-22	8/4/2020 9:47	Conductivity	854.77	uS/cm
GS-GSA-PZ-22	8/4/2020 9:47	DO	0.3	mg/L
GS-GSA-PZ-22	8/4/2020 9:47	Depth to Water Detail	56.66	
GS-GSA-PZ-22	8/4/2020 9:47	Oxidation Reduction Potention	-91.15	mv
GS-GSA-PZ-22	8/4/2020 9:47	рН	6.43	рН
GS-GSA-PZ-22	8/4/2020 9:47	Temperature	19.1	С
GS-GSA-PZ-22	8/4/2020 9:47	Turbidity	2.35	NTU
GS-GSA-PZ-22	8/4/2020 9:52	Conductivity	860.14	uS/cm
GS-GSA-PZ-22	8/4/2020 9:52	DO	0.25	mg/L
GS-GSA-PZ-22	8/4/2020 9:52	Depth to Water Detail	56.74	ft
GS-GSA-PZ-22		Oxidation Reduction Potention	-90.77	mv
GS-GSA-PZ-22	8/4/2020 9:52	рН	6.45	рН
GS-GSA-PZ-22	8/4/2020 9:52	Temperature	19.16	С
GS-GSA-PZ-22	8/4/2020 9:52	Turbidity	2.79	NTU
GS-GSA-PZ-22	8/4/2020 9:57	Conductivity	863.41	uS/cm
GS-GSA-PZ-22	8/4/2020 9:57	DO	0.22	mg/L
GS-GSA-PZ-22	8/4/2020 9:57	Depth to Water Detail	56.77	
GS-GSA-PZ-22	8/4/2020 9:57	Oxidation Reduction Potention	-86.46	mv
GS-GSA-PZ-22	8/4/2020 9:57	рН	6.42	рН
GS-GSA-PZ-22	8/4/2020 9:57	Temperature	18.94	С
GS-GSA-PZ-22	8/4/2020 9:57		1.3	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
APCO-GS-GYPLF-MW-1	8/3/2020 11:23	Conductivity	1667.32	uS/cm
APCO-GS-GYPLF-MW-1	8/3/2020 11:23	DO	0.98	mg/L
APCO-GS-GYPLF-MW-1	8/3/2020 11:23	Depth to Water Detail	90.32	ft
APCO-GS-GYPLF-MW-1	8/3/2020 11:23	Oxidation Reduction Potention	231.7	mv
APCO-GS-GYPLF-MW-1	8/3/2020 11:23	рН	5.07	рН
APCO-GS-GYPLF-MW-1	8/3/2020 11:23	Temperature	20.24	
APCO-GS-GYPLF-MW-1	8/3/2020 11:23	Turbidity	3.36	NTU
APCO-GS-GYPLF-MW-1	8/3/2020 11:28	Conductivity	1665.03	uS/cm
APCO-GS-GYPLF-MW-1	8/3/2020 11:28	DO	0.67	mg/L
APCO-GS-GYPLF-MW-1	8/3/2020 11:28	Depth to Water Detail	90.32	ft
APCO-GS-GYPLF-MW-1	8/3/2020 11:28	Oxidation Reduction Potention	258	mv
APCO-GS-GYPLF-MW-1	8/3/2020 11:28	рН	5.08	рН
APCO-GS-GYPLF-MW-1	8/3/2020 11:28	Temperature	20.21	С
APCO-GS-GYPLF-MW-1	8/3/2020 11:28	Turbidity	1.89	NTU
APCO-GS-GYPLF-MW-1	8/3/2020 11:33	Conductivity	1655.99	uS/cm
APCO-GS-GYPLF-MW-1	8/3/2020 11:33	DO	0.53	mg/L
APCO-GS-GYPLF-MW-1	8/3/2020 11:33	Depth to Water Detail	90.32	ft
APCO-GS-GYPLF-MW-1	8/3/2020 11:33	Oxidation Reduction Potention	274.59	mv
APCO-GS-GYPLF-MW-1	8/3/2020 11:33	рН	5.08	pН
APCO-GS-GYPLF-MW-1	8/3/2020 11:33	Temperature	20.26	С
APCO-GS-GYPLF-MW-1	8/3/2020 11:33	Turbidity	1.83	NTU
APCO-GS-GYPLF-MW-1	8/3/2020 11:38	Conductivity	1647.17	uS/cm
APCO-GS-GYPLF-MW-1	8/3/2020 11:38		0.48	mg/L
APCO-GS-GYPLF-MW-1	8/3/2020 11:38	Depth to Water Detail	90.32	
APCO-GS-GYPLF-MW-1		Oxidation Reduction Potention	286.16	mv
APCO-GS-GYPLF-MW-1	8/3/2020 11:38	рН	5.08	рН
APCO-GS-GYPLF-MW-1	8/3/2020 11:38		20.09	С
APCO-GS-GYPLF-MW-1	8/3/2020 11:38	Turbidity	2.06	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
APCO-GS-GYPLF-MW-2	8/3/2020 12:36	Conductivity	1307.36	uS/cm
APCO-GS-GYPLF-MW-2	8/3/2020 12:36	DO	0.31	mg/L
APCO-GS-GYPLF-MW-2	8/3/2020 12:36	Depth to Water Detail	85.09	ft
APCO-GS-GYPLF-MW-2	8/3/2020 12:36	Oxidation Reduction Potention	65.57	mv
APCO-GS-GYPLF-MW-2	8/3/2020 12:36	рН	5.93	pН
APCO-GS-GYPLF-MW-2	8/3/2020 12:36	Temperature	20.2	С
APCO-GS-GYPLF-MW-2	8/3/2020 12:36	Turbidity	7.32	NTU
APCO-GS-GYPLF-MW-2	8/3/2020 12:41	Conductivity	1295.93	uS/cm
APCO-GS-GYPLF-MW-2	8/3/2020 12:41	DO	0.28	mg/L
APCO-GS-GYPLF-MW-2	8/3/2020 12:41	Depth to Water Detail	85.09	ft
APCO-GS-GYPLF-MW-2	8/3/2020 12:41	Oxidation Reduction Potention	62.52	mv
APCO-GS-GYPLF-MW-2	8/3/2020 12:41	рН	5.93	pН
APCO-GS-GYPLF-MW-2	8/3/2020 12:41	Temperature	20.09	С
APCO-GS-GYPLF-MW-2	8/3/2020 12:41	Turbidity	4.34	NTU
APCO-GS-GYPLF-MW-2	8/3/2020 12:46	Conductivity	1291.84	uS/cm
APCO-GS-GYPLF-MW-2	8/3/2020 12:46	DO	0.28	mg/L
APCO-GS-GYPLF-MW-2	8/3/2020 12:46	Depth to Water Detail	85.09	ft
APCO-GS-GYPLF-MW-2	8/3/2020 12:46	Oxidation Reduction Potention	60.74	mv
APCO-GS-GYPLF-MW-2	8/3/2020 12:46	рН	5.94	pН
APCO-GS-GYPLF-MW-2	8/3/2020 12:46	Temperature	20.25	С
APCO-GS-GYPLF-MW-2	8/3/2020 12:46	Turbidity	3.64	NTU
APCO-GS-GYPLF-MW-2	8/3/2020 12:51	Conductivity	1280.91	uS/cm
APCO-GS-GYPLF-MW-2	8/3/2020 12:51	DO		mg/L
APCO-GS-GYPLF-MW-2	8/3/2020 12:51	Depth to Water Detail	85.09	
APCO-GS-GYPLF-MW-2	8/3/2020 12:51	Oxidation Reduction Potention	59.52	mv
APCO-GS-GYPLF-MW-2	8/3/2020 12:51	рН	5.95	рН
APCO-GS-GYPLF-MW-2	8/3/2020 12:51	Temperature	20.21	С
APCO-GS-GYPLF-MW-2	8/3/2020 12:51	Turbidity	3.65	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
APCO-GS-GYPLF-MW-3	8/3/2020 13:58	Conductivity	1934.39	uS/cm
APCO-GS-GYPLF-MW-3	8/3/2020 13:58	DO	8.13	mg/L
APCO-GS-GYPLF-MW-3	8/3/2020 13:58	Depth to Water Detail	110.96	ft
APCO-GS-GYPLF-MW-3		Oxidation Reduction Potention	154.66	mv
APCO-GS-GYPLF-MW-3	8/3/2020 13:58	рН	5.76	рН
APCO-GS-GYPLF-MW-3	8/3/2020 13:58	Temperature	25.81	С
APCO-GS-GYPLF-MW-3	8/3/2020 13:58		2.47	NTU
APCO-GS-GYPLF-MW-3	8/3/2020 14:03	Conductivity	2133.36	uS/cm
APCO-GS-GYPLF-MW-3	8/3/2020 14:03	DO	2.97	mg/L
APCO-GS-GYPLF-MW-3	8/3/2020 14:03	Depth to Water Detail	111.13	ft
APCO-GS-GYPLF-MW-3	8/3/2020 14:03	Oxidation Reduction Potention	169.12	mv
APCO-GS-GYPLF-MW-3	8/3/2020 14:03	рН	5.3	рН
APCO-GS-GYPLF-MW-3	8/3/2020 14:03	Temperature	25.43	С
APCO-GS-GYPLF-MW-3	8/3/2020 14:03	Turbidity	10.03	NTU
APCO-GS-GYPLF-MW-3	8/3/2020 14:08	Conductivity	2135.37	uS/cm
APCO-GS-GYPLF-MW-3	8/3/2020 14:08	DO	1.56	mg/L
APCO-GS-GYPLF-MW-3	8/3/2020 14:08	Depth to Water Detail	111.26	ft
APCO-GS-GYPLF-MW-3		Oxidation Reduction Potention	182.22	mv
APCO-GS-GYPLF-MW-3	8/3/2020 14:08	рН	5.25	рН
APCO-GS-GYPLF-MW-3	8/3/2020 14:08	Temperature	25.07	С
APCO-GS-GYPLF-MW-3	8/3/2020 14:08	Turbidity	16.5	NTU
APCO-GS-GYPLF-MW-3	8/3/2020 14:13	Conductivity	2175.55	uS/cm
APCO-GS-GYPLF-MW-3	8/3/2020 14:13	DO	1.42	mg/L
APCO-GS-GYPLF-MW-3	8/3/2020 14:13	Depth to Water Detail	111.46	ft
APCO-GS-GYPLF-MW-3	8/3/2020 14:13	Oxidation Reduction Potention	195.85	mv
APCO-GS-GYPLF-MW-3	8/3/2020 14:13	рН	5.16	рН
APCO-GS-GYPLF-MW-3	8/3/2020 14:13	Temperature	24.97	С
APCO-GS-GYPLF-MW-3	8/3/2020 14:13	Turbidity	12.4	NTU
APCO-GS-GYPLF-MW-3	8/3/2020 14:18	Conductivity	2194.87	uS/cm
APCO-GS-GYPLF-MW-3	8/3/2020 14:18	DO	1.43	mg/L
APCO-GS-GYPLF-MW-3	8/3/2020 14:18	Depth to Water Detail	111.57	
APCO-GS-GYPLF-MW-3	8/3/2020 14:18	Oxidation Reduction Potention	203.89	mv
APCO-GS-GYPLF-MW-3	8/3/2020 14:18	рН	5.09	рН
APCO-GS-GYPLF-MW-3	8/3/2020 14:18	Temperature	25.07	С
APCO-GS-GYPLF-MW-3	8/3/2020 14:18	Turbidity	8.19	NTU
APCO-GS-GYPLF-MW-3	8/3/2020 14:23	Conductivity	2198.42	uS/cm
APCO-GS-GYPLF-MW-3	8/3/2020 14:23	DO		mg/L
APCO-GS-GYPLF-MW-3	8/3/2020 14:23	Depth to Water Detail	111.72	ft
APCO-GS-GYPLF-MW-3	8/3/2020 14:23	Oxidation Reduction Potention	206.72	
APCO-GS-GYPLF-MW-3	8/3/2020 14:23	рН	5.06	рН
APCO-GS-GYPLF-MW-3	8/3/2020 14:23	Temperature	24.12	С
APCO-GS-GYPLF-MW-3	8/3/2020 14:23	Turbidity	6.72	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-11H	8/4/2020 9:14	Conductivity	1338.47	uS/cm
GS-GSA-MW-11H	8/4/2020 9:14	DO	0.27	mg/L
GS-GSA-MW-11H	8/4/2020 9:14	Depth to Water Detail	8.38	ft
GS-GSA-MW-11H	8/4/2020 9:14	Oxidation Reduction Potention	54.53	mv
GS-GSA-MW-11H	8/4/2020 9:14	рН	5.72	рН
GS-GSA-MW-11H	8/4/2020 9:14	Temperature	20.49	C
GS-GSA-MW-11H	8/4/2020 9:14	Turbidity	16.4	NTU
GS-GSA-MW-11H	8/4/2020 9:19	Conductivity	1313.6	uS/cm
GS-GSA-MW-11H	8/4/2020 9:19	DO		mg/L
GS-GSA-MW-11H	8/4/2020 9:19	Depth to Water Detail	8.42	ft
GS-GSA-MW-11H	8/4/2020 9:19	Oxidation Reduction Potention	58.47	mv
GS-GSA-MW-11H	8/4/2020 9:19	*	5.73	
GS-GSA-MW-11H	8/4/2020 9:19	Temperature	20.55	С
GS-GSA-MW-11H	8/4/2020 9:19	Turbidity	12	NTU
GS-GSA-MW-11H	8/4/2020 9:24	Conductivity	1293	uS/cm
GS-GSA-MW-11H	8/4/2020 9:24	DO	0.31	mg/L
GS-GSA-MW-11H	8/4/2020 9:24	Depth to Water Detail	8.42	ft
GS-GSA-MW-11H	8/4/2020 9:24	Oxidation Reduction Potention	60.4	mv
GS-GSA-MW-11H	8/4/2020 9:24	рН	5.73	рН
GS-GSA-MW-11H	8/4/2020 9:24	Temperature	20.41	С
GS-GSA-MW-11H	8/4/2020 9:24	Turbidity	11.43	NTU
GS-GSA-MW-11H	8/4/2020 9:29	Conductivity	1267.37	uS/cm
GS-GSA-MW-11H	8/4/2020 9:29	DO	0.33	mg/L
GS-GSA-MW-11H	8/4/2020 9:29	Depth to Water Detail	8.42	ft
GS-GSA-MW-11H	8/4/2020 9:29	Oxidation Reduction Potention	60.84	mv
GS-GSA-MW-11H	8/4/2020 9:29	рН	5.74	рН
GS-GSA-MW-11H	8/4/2020 9:29	Temperature	20.41	С
GS-GSA-MW-11H	8/4/2020 9:29	Turbidity	9.44	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-13H	8/4/2020 10:33	Conductivity	1243.95	uS/cm
GS-GSA-MW-13H	8/4/2020 10:33	DO	0.25	mg/L
GS-GSA-MW-13H	8/4/2020 10:33	Depth to Water Detail	10.26	ft
GS-GSA-MW-13H	8/4/2020 10:33	Oxidation Reduction Potention	-3.38	mv
GS-GSA-MW-13H	8/4/2020 10:33	рН	5.87	рН
GS-GSA-MW-13H	8/4/2020 10:33	Temperature	20.46	С
GS-GSA-MW-13H	8/4/2020 10:33	Turbidity	14.6	NTU
GS-GSA-MW-13H	8/4/2020 10:38	Conductivity	1231.55	uS/cm
GS-GSA-MW-13H	8/4/2020 10:38		0.23	mg/L
GS-GSA-MW-13H	8/4/2020 10:38	Depth to Water Detail	10.26	ft
GS-GSA-MW-13H	8/4/2020 10:38	Oxidation Reduction Potention	-8.37	mv
GS-GSA-MW-13H	8/4/2020 10:38	рН	5.91	рН
GS-GSA-MW-13H	8/4/2020 10:38	Temperature	20.49	С
GS-GSA-MW-13H	8/4/2020 10:38	Turbidity	12.75	NTU
GS-GSA-MW-13H	8/4/2020 10:43	Conductivity	1207.99	uS/cm
GS-GSA-MW-13H	8/4/2020 10:43	DO	0.23	mg/L
GS-GSA-MW-13H	8/4/2020 10:43	Depth to Water Detail	10.26	ft
GS-GSA-MW-13H	8/4/2020 10:43	Oxidation Reduction Potention	-10.05	mv
GS-GSA-MW-13H	8/4/2020 10:43	рН	5.9	рН
GS-GSA-MW-13H	8/4/2020 10:43	Temperature	20.34	С
GS-GSA-MW-13H	8/4/2020 10:43	Turbidity	9.26	NTU
GS-GSA-MW-13H	8/4/2020 10:48	Conductivity	1214.27	uS/cm
GS-GSA-MW-13H	8/4/2020 10:48	DO	0.23	mg/L
GS-GSA-MW-13H	8/4/2020 10:48	Depth to Water Detail	10.26	ft
GS-GSA-MW-13H	8/4/2020 10:48	Oxidation Reduction Potention	-13.92	mv
GS-GSA-MW-13H	8/4/2020 10:48	рН	5.92	рН
GS-GSA-MW-13H	8/4/2020 10:48	Temperature	20.27	С
GS-GSA-MW-13H	8/4/2020 10:48	Turbidity	6.72	NTU
GS-GSA-MW-13H	8/4/2020 10:53		1208.09	uS/cm
GS-GSA-MW-13H	8/4/2020 10:53	DO	0.23	mg/L
GS-GSA-MW-13H	8/4/2020 10:53	Depth to Water Detail	10.26	ft
GS-GSA-MW-13H	8/4/2020 10:53	Oxidation Reduction Potention	-13.85	mv
GS-GSA-MW-13H	8/4/2020 10:53	рН	5.91	рН
GS-GSA-MW-13H	8/4/2020 10:53	Temperature	20.24	С
GS-GSA-MW-13H	8/4/2020 10:53	Turbidity	5.06	NTU
GS-GSA-MW-13H	8/4/2020 10:55	Conductivity	1208	uS/cm
GS-GSA-MW-13H	8/4/2020 10:55	DO	0.22	mg/L
GS-GSA-MW-13H	8/4/2020 10:55	Depth to Water Detail	10.26	ft
GS-GSA-MW-13H		Oxidation Reduction Potention	-17.05	mv
GS-GSA-MW-13H	8/4/2020 10:55	рН	5.92	рН
GS-GSA-MW-13H	8/4/2020 10:55	Temperature	20.36	С
GS-GSA-MW-13H	8/4/2020 10:55	Turbidity	4.91	NTU
GS-GSA-MW-13H	8/4/2020 11:00	Conductivity	1196.04	uS/cm
GS-GSA-MW-13H	8/4/2020 11:00		0.22	mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-13H	8/4/2020 11:00	Depth to Water Detail	10.26	ft
GS-GSA-MW-13H	8/4/2020 11:00	Oxidation Reduction Potention	-16.53	mv
GS-GSA-MW-13H	8/4/2020 11:00	рН	5.9	рН
GS-GSA-MW-13H	8/4/2020 11:00	Temperature	20.15	C
GS-GSA-MW-13H	8/4/2020 11:00	Turbidity	4.21	NTU
GS-GSA-MW-13H	8/4/2020 11:05	Conductivity	1199.6	uS/cm
GS-GSA-MW-13H	8/4/2020 11:05	DO	0.23	mg/L
GS-GSA-MW-13H	8/4/2020 11:05	Depth to Water Detail	10.26	ft
GS-GSA-MW-13H	8/4/2020 11:05	Oxidation Reduction Potention	-17.01	mv
GS-GSA-MW-13H	8/4/2020 11:05	рН	5.89	рН
GS-GSA-MW-13H	8/4/2020 11:05	Temperature	20.11	С
GS-GSA-MW-13H	8/4/2020 11:05	Turbidity	4.08	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9H	8/4/2020 11:55	Conductivity	2003.9	uS/cm
GS-GSA-MW-9H	8/4/2020 11:55		0.52	mg/L
GS-GSA-MW-9H	8/4/2020 11:55	Depth to Water Detail	49.83	ft
GS-GSA-MW-9H	8/4/2020 11:55	Oxidation Reduction Potention	125.17	mv
GS-GSA-MW-9H	8/4/2020 11:55	рН	5.14	рН
GS-GSA-MW-9H	8/4/2020 11:55	Temperature	22.12	C
GS-GSA-MW-9H	8/4/2020 11:55	Turbidity	16.5	NTU
GS-GSA-MW-9H	8/4/2020 12:00	Conductivity	2015.84	uS/cm
GS-GSA-MW-9H	8/4/2020 12:00	DO	0.5	mg/L
GS-GSA-MW-9H	8/4/2020 12:00	Depth to Water Detail	50.41	ft
GS-GSA-MW-9H	8/4/2020 12:00	Oxidation Reduction Potention	123.67	mv
GS-GSA-MW-9H	8/4/2020 12:00	рН	5.21	рН
GS-GSA-MW-9H	8/4/2020 12:00	Temperature	22.18	С
GS-GSA-MW-9H	8/4/2020 12:00	Turbidity	12	NTU
GS-GSA-MW-9H	8/4/2020 12:05	Conductivity	2018.74	uS/cm
GS-GSA-MW-9H	8/4/2020 12:05	DO	0.45	mg/L
GS-GSA-MW-9H	8/4/2020 12:05	Depth to Water Detail	50.6	ft
GS-GSA-MW-9H	8/4/2020 12:05	Oxidation Reduction Potention	118.63	mv
GS-GSA-MW-9H	8/4/2020 12:05	рН	5.28	рН
GS-GSA-MW-9H	8/4/2020 12:05	Temperature	22.07	С
GS-GSA-MW-9H	8/4/2020 12:05	Turbidity	11.4	NTU
GS-GSA-MW-9H	8/4/2020 12:10	Conductivity	2024.78	uS/cm
GS-GSA-MW-9H	8/4/2020 12:10	DO	0.44	mg/L
GS-GSA-MW-9H	8/4/2020 12:10	Depth to Water Detail	50.66	ft
GS-GSA-MW-9H	8/4/2020 12:10	Oxidation Reduction Potention	116	mv
GS-GSA-MW-9H	8/4/2020 12:10	рН	5.31	
GS-GSA-MW-9H	8/4/2020 12:10	Temperature	22.27	С
GS-GSA-MW-9H	8/4/2020 12:10		11.07	NTU
GS-GSA-MW-9H	8/4/2020 12:15	Conductivity	2019.87	uS/cm
GS-GSA-MW-9H	8/4/2020 12:15	DO	0.44	mg/L
GS-GSA-MW-9H		Depth to Water Detail	50.74	
GS-GSA-MW-9H	8/4/2020 12:15	Oxidation Reduction Potention	115.04	mv
GS-GSA-MW-9H	8/4/2020 12:15	рН	5.33	рН
GS-GSA-MW-9H	8/4/2020 12:15	Temperature	22.1	С
GS-GSA-MW-9H	8/4/2020 12:15	Turbidity	8.29	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9V	8/4/2020 13:02	Conductivity	2584.66	uS/cm
GS-GSA-MW-9V	8/4/2020 13:02	DO		mg/L
GS-GSA-MW-9V	8/4/2020 13:02	Depth to Water Detail	47.41	ft
GS-GSA-MW-9V	8/4/2020 13:02	Oxidation Reduction Potention	-48.58	mv
GS-GSA-MW-9V	8/4/2020 13:02	рН	6.93	рН
GS-GSA-MW-9V	8/4/2020 13:02	Temperature	25.2	C
GS-GSA-MW-9V	8/4/2020 13:02	Turbidity	6.1	NTU
GS-GSA-MW-9V	8/4/2020 13:07	Conductivity	2580.11	uS/cm
GS-GSA-MW-9V	8/4/2020 13:07	DO		mg/L
GS-GSA-MW-9V	8/4/2020 13:07	Depth to Water Detail	48.81	ft
GS-GSA-MW-9V	8/4/2020 13:07	Oxidation Reduction Potention	-50.6	mv
GS-GSA-MW-9V	8/4/2020 13:07	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 13:07	Temperature	25.48	С
GS-GSA-MW-9V	8/4/2020 13:07	Turbidity	5.56	NTU
GS-GSA-MW-9V	8/4/2020 13:12	Conductivity	2566.25	uS/cm
GS-GSA-MW-9V	8/4/2020 13:12	DO	1.05	mg/L
GS-GSA-MW-9V	8/4/2020 13:12	Depth to Water Detail	50.26	ft
GS-GSA-MW-9V		Oxidation Reduction Potention	-54.03	mv
GS-GSA-MW-9V	8/4/2020 13:12	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 13:12	Temperature	25.38	
GS-GSA-MW-9V	8/4/2020 13:12	Turbidity	5.29	NTU
GS-GSA-MW-9V	8/4/2020 13:17	Conductivity	2521.6	uS/cm
GS-GSA-MW-9V	8/4/2020 13:17		1.02	mg/L
GS-GSA-MW-9V	8/4/2020 13:17	Depth to Water Detail	50.77	
GS-GSA-MW-9V		Oxidation Reduction Potention	-59.54	mv
GS-GSA-MW-9V	8/4/2020 13:17	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 13:17	Temperature	25.18	С
GS-GSA-MW-9V	8/4/2020 13:17	Turbidity	4.83	NTU
GS-GSA-MW-9V	8/4/2020 13:22	Conductivity	2498.93	uS/cm
GS-GSA-MW-9V	8/4/2020 13:22	DO	0.97	mg/L
GS-GSA-MW-9V		Depth to Water Detail	51.14	
GS-GSA-MW-9V		Oxidation Reduction Potention	-65.34	mv
GS-GSA-MW-9V	8/4/2020 13:22	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 13:22	Temperature	25.33	C
GS-GSA-MW-9V	8/4/2020 13:22	Turbidity	4.68	NTU
GS-GSA-MW-9V	8/4/2020 13:27		2486.3	
GS-GSA-MW-9V	8/4/2020 13:27		0.9	mg/L
GS-GSA-MW-9V	8/4/2020 13:27	Depth to Water Detail	51.41	
GS-GSA-MW-9V		Oxidation Reduction Potention	-70.99	mv
GS-GSA-MW-9V	8/4/2020 13:27		6.93	
GS-GSA-MW-9V	8/4/2020 13:27	*	25.29	
GS-GSA-MW-9V	8/4/2020 13:27	*		NTU
GS-GSA-MW-9V	8/4/2020 13:32	Ţ	2454.35	
GS-GSA-MW-9V	8/4/2020 13:32	·		mg/L

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9V	8/4/2020 13:32	Depth to Water Detail	52.03	ft
GS-GSA-MW-9V		Oxidation Reduction Potention	-75.26	mv
GS-GSA-MW-9V	8/4/2020 13:32	рН	6.93	рН
GS-GSA-MW-9V	8/4/2020 13:32	Temperature	25.3	C
GS-GSA-MW-9V	8/4/2020 13:32	Turbidity	6.4	NTU
GS-GSA-MW-9V	8/4/2020 13:37	Conductivity	2474.24	uS/cm
GS-GSA-MW-9V	8/4/2020 13:37	DO	0.89	mg/L
GS-GSA-MW-9V	8/4/2020 13:37	Depth to Water Detail	52.29	
GS-GSA-MW-9V	8/4/2020 13:37	Oxidation Reduction Potention	-77.85	
GS-GSA-MW-9V	8/4/2020 13:37	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 13:37	Temperature	25.65	С
GS-GSA-MW-9V	8/4/2020 13:37	Turbidity	3.95	NTU
GS-GSA-MW-9V	8/4/2020 13:42	Conductivity	2425.97	uS/cm
GS-GSA-MW-9V	8/4/2020 13:42	DO	0.82	mg/L
GS-GSA-MW-9V	8/4/2020 13:42	Depth to Water Detail	52.74	ft
GS-GSA-MW-9V	8/4/2020 13:42	Oxidation Reduction Potention	-80.65	mv
GS-GSA-MW-9V	8/4/2020 13:42	рН	6.93	рН
GS-GSA-MW-9V	8/4/2020 13:42	Temperature	25.56	С
GS-GSA-MW-9V	8/4/2020 13:42	Turbidity	3.85	NTU
GS-GSA-MW-9V	8/4/2020 13:47	Conductivity	2421.61	uS/cm
GS-GSA-MW-9V	8/4/2020 13:47	DO	0.79	mg/L
GS-GSA-MW-9V	8/4/2020 13:47	Depth to Water Detail	53.02	
GS-GSA-MW-9V	8/4/2020 13:47	Oxidation Reduction Potention	-82.26	mv
GS-GSA-MW-9V	8/4/2020 13:47	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 13:47	Temperature	25.44	С
GS-GSA-MW-9V	8/4/2020 13:47	Turbidity	3.44	NTU
GS-GSA-MW-9V	8/4/2020 13:52	Conductivity	2404.47	uS/cm
GS-GSA-MW-9V	8/4/2020 13:52		0.82	mg/L
GS-GSA-MW-9V	8/4/2020 13:52	Depth to Water Detail	53.36	
GS-GSA-MW-9V	8/4/2020 13:52	Oxidation Reduction Potention	-84.42	mv
GS-GSA-MW-9V	8/4/2020 13:52	pН	6.92	pН
GS-GSA-MW-9V	8/4/2020 13:52	Temperature	25.78	С
GS-GSA-MW-9V	8/4/2020 13:52	Turbidity	4.12	NTU
GS-GSA-MW-9V	8/4/2020 13:57	Conductivity	2546.97	uS/cm
GS-GSA-MW-9V	8/4/2020 13:57	DO	0.86	mg/L
GS-GSA-MW-9V	8/4/2020 13:57	Depth to Water Detail	53.54	ft
GS-GSA-MW-9V	8/4/2020 13:57	Oxidation Reduction Potention	-86.11	mv
GS-GSA-MW-9V	8/4/2020 13:57	рН	6.93	рН
GS-GSA-MW-9V	8/4/2020 13:57	Temperature	25.05	С
GS-GSA-MW-9V	8/4/2020 13:57	Turbidity	3.94	NTU
GS-GSA-MW-9V	8/4/2020 14:02	Conductivity	2508.13	uS/cm
GS-GSA-MW-9V	8/4/2020 14:02	DO	0.85	mg/L
GS-GSA-MW-9V	8/4/2020 14:02	Depth to Water Detail	53.81	ft
GS-GSA-MW-9V	8/4/2020 14:02	Oxidation Reduction Potention	-88.11	mv

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9V	8/4/2020 14:02	рН	6.93	рН
GS-GSA-MW-9V	8/4/2020 14:02	Temperature	24.61	С
GS-GSA-MW-9V	8/4/2020 14:02	Turbidity	3.88	NTU
GS-GSA-MW-9V	8/4/2020 14:07	Conductivity	2484.01	uS/cm
GS-GSA-MW-9V	8/4/2020 14:07	DO	0.83	mg/L
GS-GSA-MW-9V	8/4/2020 14:07	Depth to Water Detail	54.03	ft
GS-GSA-MW-9V		Oxidation Reduction Potention	-89.43	mv
GS-GSA-MW-9V	8/4/2020 14:07	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 14:07	Temperature	25.08	С
GS-GSA-MW-9V	8/4/2020 14:07	Turbidity	3.18	NTU
GS-GSA-MW-9V	8/4/2020 14:12	Conductivity	2452.51	uS/cm
GS-GSA-MW-9V	8/4/2020 14:12	DO	0.84	mg/L
GS-GSA-MW-9V	8/4/2020 14:12	Depth to Water Detail	54.41	ft
GS-GSA-MW-9V	8/4/2020 14:12	Oxidation Reduction Potention	-90.77	mv
GS-GSA-MW-9V	8/4/2020 14:12	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 14:12	Temperature	25.3	С
GS-GSA-MW-9V	8/4/2020 14:12	Turbidity	3.62	NTU
GS-GSA-MW-9V	8/4/2020 14:17	Conductivity	2489.03	uS/cm
GS-GSA-MW-9V	8/4/2020 14:17	DO	0.28	mg/L
GS-GSA-MW-9V	8/4/2020 14:17	Depth to Water Detail	58.66	ft
GS-GSA-MW-9V	8/4/2020 14:17	Oxidation Reduction Potention	-86.74	mv
GS-GSA-MW-9V	8/4/2020 14:17	рН	6.97	рН
GS-GSA-MW-9V	8/4/2020 14:17	Temperature	21.33	С
GS-GSA-MW-9V	8/4/2020 14:17	Turbidity	3.57	NTU
GS-GSA-MW-9V	8/4/2020 14:19	Conductivity	2462.94	uS/cm
GS-GSA-MW-9V	8/4/2020 14:19	DO	0.25	mg/L
GS-GSA-MW-9V	8/4/2020 14:19	Depth to Water Detail	0	ft
GS-GSA-MW-9V	8/4/2020 14:19	Oxidation Reduction Potention	-82.01	mv
GS-GSA-MW-9V	8/4/2020 14:19	рН	6.97	рН
GS-GSA-MW-9V	8/4/2020 14:19	Temperature	21.37	С
GS-GSA-MW-9V	8/4/2020 14:19	Turbidity	0	NTU
GS-GSA-MW-9V	8/4/2020 14:24	Conductivity	2441.31	uS/cm
GS-GSA-MW-9V	8/4/2020 14:24	DO	0.24	mg/L
GS-GSA-MW-9V	8/4/2020 14:24	Depth to Water Detail	59.54	ft
GS-GSA-MW-9V	8/4/2020 14:24	Oxidation Reduction Potention	-80.93	mv
GS-GSA-MW-9V	8/4/2020 14:24	рН	6.98	pН
GS-GSA-MW-9V	8/4/2020 14:24	Temperature	21.06	С
GS-GSA-MW-9V	8/4/2020 14:24	Turbidity	3.01	NTU
GS-GSA-MW-9V	8/4/2020 14:29	Conductivity	2439.71	uS/cm
GS-GSA-MW-9V	8/4/2020 14:29	DO	0.24	mg/L
GS-GSA-MW-9V	8/4/2020 14:29	Depth to Water Detail	61.97	_
GS-GSA-MW-9V	8/4/2020 14:29	Oxidation Reduction Potention	-80.52	mv
GS-GSA-MW-9V	8/4/2020 14:29	рН	6.98	рН
GS-GSA-MW-9V	8/4/2020 14:29	Temperature	21.02	С

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9V	8/4/2020 14:29	Turbidity	3.69	NTU
GS-GSA-MW-9V	8/4/2020 14:34	Conductivity	2432.95	uS/cm
GS-GSA-MW-9V	8/4/2020 14:34		0.23	mg/L
GS-GSA-MW-9V	8/4/2020 14:34	Depth to Water Detail	64.21	ft
GS-GSA-MW-9V		Oxidation Reduction Potention	-80.29	mv
GS-GSA-MW-9V	8/4/2020 14:34	рН	6.97	рН
GS-GSA-MW-9V	8/4/2020 14:34	Temperature	20.99	C
GS-GSA-MW-9V	8/4/2020 14:34		3.44	NTU
GS-GSA-MW-9V	8/4/2020 14:39	Conductivity	2409.22	uS/cm
GS-GSA-MW-9V	8/4/2020 14:39	DO	0.23	mg/L
GS-GSA-MW-9V	8/4/2020 14:39	Depth to Water Detail	66.16	ft
GS-GSA-MW-9V		Oxidation Reduction Potention	-79.9	mv
GS-GSA-MW-9V	8/4/2020 14:39	рН	6.95	рН
GS-GSA-MW-9V	8/4/2020 14:39	Temperature	21.01	
GS-GSA-MW-9V	8/4/2020 14:39		3.84	NTU
GS-GSA-MW-9V	8/4/2020 14:44	Conductivity	2413.67	uS/cm
GS-GSA-MW-9V	8/4/2020 14:44	DO	0.26	mg/L
GS-GSA-MW-9V	8/4/2020 14:44	Depth to Water Detail	68.34	ft
GS-GSA-MW-9V	8/4/2020 14:44	Oxidation Reduction Potention	-80.23	mv
GS-GSA-MW-9V	8/4/2020 14:44	рН	6.93	рН
GS-GSA-MW-9V	8/4/2020 14:44	Temperature	20.92	C
GS-GSA-MW-9V	8/4/2020 14:44	Turbidity	2.74	NTU
GS-GSA-MW-9V	8/4/2020 14:49	Conductivity	2407.76	uS/cm
GS-GSA-MW-9V	8/4/2020 14:49	DO	0.24	mg/L
GS-GSA-MW-9V	8/4/2020 14:49	Depth to Water Detail	70.21	ft
GS-GSA-MW-9V	8/4/2020 14:49	Oxidation Reduction Potention	-79.36	mv
GS-GSA-MW-9V	8/4/2020 14:49	рН	6.92	рН
GS-GSA-MW-9V	8/4/2020 14:49	Temperature	20.77	С
GS-GSA-MW-9V	8/4/2020 14:49			NTU
GS-GSA-MW-9V	8/4/2020 14:54	Conductivity	2404.82	uS/cm
GS-GSA-MW-9V	8/4/2020 14:54	DO	0.24	mg/L
GS-GSA-MW-9V	8/4/2020 14:54	Depth to Water Detail	72.33	ft
GS-GSA-MW-9V	8/4/2020 14:54	Oxidation Reduction Potention	-78.78	mv
GS-GSA-MW-9V	8/4/2020 14:54	рН	6.9	pН
GS-GSA-MW-9V	8/4/2020 14:54	Temperature	20.79	С
GS-GSA-MW-9V	8/4/2020 14:54	Turbidity	3.6	NTU
GS-GSA-MW-9V	8/4/2020 14:59	Conductivity	2407.39	uS/cm
GS-GSA-MW-9V	8/4/2020 14:59	DO	0.24	mg/L
GS-GSA-MW-9V	8/4/2020 14:59	Depth to Water Detail	73.71	ft
GS-GSA-MW-9V	8/4/2020 14:59	Oxidation Reduction Potention	-77.42	mv
GS-GSA-MW-9V	8/4/2020 14:59	рН	6.88	pН
GS-GSA-MW-9V	8/4/2020 14:59	Temperature	20.85	С
GS-GSA-MW-9V	8/4/2020 14:59	Turbidity	3.37	NTU
GS-GSA-MW-9V	8/4/2020 15:04	Conductivity	2409.83	uS/cm

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9V	8/4/2020 15:04	DO	0.24	mg/L
GS-GSA-MW-9V	8/4/2020 15:04	Depth to Water Detail	75.72	ft
GS-GSA-MW-9V	8/4/2020 15:04	Oxidation Reduction Potention	-76.94	mv
GS-GSA-MW-9V	8/4/2020 15:04	рН	6.86	рН
GS-GSA-MW-9V	8/4/2020 15:04	Temperature	21.16	
GS-GSA-MW-9V	8/4/2020 15:04	Turbidity	2.57	NTU
GS-GSA-MW-9V	8/4/2020 15:09	Conductivity	2409.77	uS/cm
GS-GSA-MW-9V	8/4/2020 15:09	DO	0.25	mg/L
GS-GSA-MW-9V	8/4/2020 15:09	Depth to Water Detail	77.55	ft
GS-GSA-MW-9V	8/4/2020 15:09	Oxidation Reduction Potention	-75.51	mv
GS-GSA-MW-9V	8/4/2020 15:09	рН	6.85	рН
GS-GSA-MW-9V	8/4/2020 15:09	Temperature	21.2	
GS-GSA-MW-9V	8/4/2020 15:09	_		NTU
GS-GSA-MW-9V	8/4/2020 15:14		2499.06	uS/cm
GS-GSA-MW-9V	8/4/2020 15:14		0.69	mg/L
GS-GSA-MW-9V	8/4/2020 15:14	Depth to Water Detail	77.58	
GS-GSA-MW-9V		Oxidation Reduction Potention	-74.75	
GS-GSA-MW-9V	8/4/2020 15:14	рН	6.83	рН
GS-GSA-MW-9V	8/4/2020 15:14	Temperature	23.97	
GS-GSA-MW-9V	8/4/2020 15:14	Turbidity	2.96	NTU
GS-GSA-MW-9V	8/4/2020 15:19	· · · · · · · · · · · · · · · · · · ·	2548.27	uS/cm
GS-GSA-MW-9V	8/4/2020 15:19	DO	0.87	mg/L
GS-GSA-MW-9V	8/4/2020 15:19	Depth to Water Detail	77.58	ft
GS-GSA-MW-9V		Oxidation Reduction Potention	-77.52	mv
GS-GSA-MW-9V	8/4/2020 15:19	рН	6.83	рН
GS-GSA-MW-9V	8/4/2020 15:19	Temperature	24.71	C
GS-GSA-MW-9V	8/4/2020 15:19	Turbidity	2.28	NTU
GS-GSA-MW-9V	8/4/2020 15:24		2577.38	uS/cm
GS-GSA-MW-9V	8/4/2020 15:24		0.96	mg/L
GS-GSA-MW-9V	8/4/2020 15:24	Depth to Water Detail	77.58	ft
GS-GSA-MW-9V		Oxidation Reduction Potention	-85.6	
GS-GSA-MW-9V	8/4/2020 15:24	рН	6.85	рН
GS-GSA-MW-9V	8/4/2020 15:24	Temperature	24.97	
GS-GSA-MW-9V	8/4/2020 15:24		2.62	NTU
GS-GSA-MW-9V	8/4/2020 15:29	Conductivity	2563.32	uS/cm
GS-GSA-MW-9V	8/4/2020 15:29		0.93	mg/L
GS-GSA-MW-9V		Depth to Water Detail	77.58	
GS-GSA-MW-9V		Oxidation Reduction Potention	-89.8	mv
GS-GSA-MW-9V	8/4/2020 15:29		6.88	
GS-GSA-MW-9V	8/4/2020 15:29		25.02	•
GS-GSA-MW-9V	8/4/2020 15:29		3.07	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
APCO-GS-GYPLF-MW-4	8/5/2020 9:32	Conductivity	2676.02	uS/cm
APCO-GS-GYPLF-MW-4	8/5/2020 9:32	DO	1.92	mg/L
APCO-GS-GYPLF-MW-4	8/5/2020 9:32	Depth to Water Detail	117.41	ft
APCO-GS-GYPLF-MW-4	8/5/2020 9:32	Oxidation Reduction Potention	121.44	mv
APCO-GS-GYPLF-MW-4	8/5/2020 9:32	рН	6.15	рН
APCO-GS-GYPLF-MW-4	8/5/2020 9:32	Temperature	20.91	С
APCO-GS-GYPLF-MW-4	8/5/2020 9:32	Turbidity	5.63	NTU
APCO-GS-GYPLF-MW-4	8/5/2020 9:37	Conductivity	2586.6	uS/cm
APCO-GS-GYPLF-MW-4	8/5/2020 9:37	DO	1.76	mg/L
APCO-GS-GYPLF-MW-4	8/5/2020 9:37	Depth to Water Detail	117.41	ft
APCO-GS-GYPLF-MW-4	8/5/2020 9:37	Oxidation Reduction Potention	129.32	mv
APCO-GS-GYPLF-MW-4	8/5/2020 9:37	рН	6.15	рН
APCO-GS-GYPLF-MW-4	8/5/2020 9:37	Temperature	20.79	С
APCO-GS-GYPLF-MW-4	8/5/2020 9:37	Turbidity	7.81	NTU
APCO-GS-GYPLF-MW-4	8/5/2020 9:42	Conductivity	2526.55	uS/cm
APCO-GS-GYPLF-MW-4	8/5/2020 9:42	DO	1.73	mg/L
APCO-GS-GYPLF-MW-4	8/5/2020 9:42	Depth to Water Detail	117.41	ft
APCO-GS-GYPLF-MW-4	8/5/2020 9:42	Oxidation Reduction Potention	135.48	mv
APCO-GS-GYPLF-MW-4	8/5/2020 9:42	рН	6.15	pН
APCO-GS-GYPLF-MW-4	8/5/2020 9:42	Temperature	20.76	С
APCO-GS-GYPLF-MW-4	8/5/2020 9:42	Turbidity	7.27	NTU
APCO-GS-GYPLF-MW-4	8/5/2020 9:47	Conductivity	2482.76	uS/cm
APCO-GS-GYPLF-MW-4	8/5/2020 9:47	DO	1.69	mg/L
APCO-GS-GYPLF-MW-4	8/5/2020 9:47	Depth to Water Detail	117.41	ft
APCO-GS-GYPLF-MW-4	8/5/2020 9:47	Oxidation Reduction Potention	140.92	mv
APCO-GS-GYPLF-MW-4	8/5/2020 9:47	рН	6.15	pН
APCO-GS-GYPLF-MW-4	8/5/2020 9:47	Temperature	20.8	C
APCO-GS-GYPLF-MW-4	8/5/2020 9:47	Turbidity	6.27	NTU
APCO-GS-GYPLF-MW-4	8/5/2020 9:52		2442.43	uS/cm
APCO-GS-GYPLF-MW-4	8/5/2020 9:52	DO	1.68	mg/L
APCO-GS-GYPLF-MW-4		Depth to Water Detail	117.41	
APCO-GS-GYPLF-MW-4	8/5/2020 9:52	Oxidation Reduction Potention	145.45	mv
APCO-GS-GYPLF-MW-4	8/5/2020 9:52	рН	6.15	рН
APCO-GS-GYPLF-MW-4	8/5/2020 9:52	Temperature	20.77	С
APCO-GS-GYPLF-MW-4	8/5/2020 9:52	Turbidity	4.87	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-14H	8/5/2020 10:51	Conductivity	1350.71	uS/cm
GS-GSA-MW-14H	8/5/2020 10:51		0.35	mg/L
GS-GSA-MW-14H	8/5/2020 10:51	Depth to Water Detail	19.33	ft
GS-GSA-MW-14H	8/5/2020 10:51	Oxidation Reduction Potention	293.11	mv
GS-GSA-MW-14H	8/5/2020 10:51	рН	3.83	pН
GS-GSA-MW-14H	8/5/2020 10:51	Temperature	20.82	С
GS-GSA-MW-14H	8/5/2020 10:51	Turbidity	4.23	NTU
GS-GSA-MW-14H	8/5/2020 10:56	Conductivity	1365.59	uS/cm
GS-GSA-MW-14H	8/5/2020 10:56	DO	0.32	mg/L
GS-GSA-MW-14H	8/5/2020 10:56	Depth to Water Detail	19.33	ft
GS-GSA-MW-14H	8/5/2020 10:56	Oxidation Reduction Potention	293	mv
GS-GSA-MW-14H	8/5/2020 10:56	рН	3.83	рН
GS-GSA-MW-14H	8/5/2020 10:56	Temperature	20.79	С
GS-GSA-MW-14H	8/5/2020 10:56	Turbidity	3.47	NTU
GS-GSA-MW-14H	8/5/2020 11:01	Conductivity	1373.6	uS/cm
GS-GSA-MW-14H	8/5/2020 11:01		0.31	mg/L
GS-GSA-MW-14H	8/5/2020 11:01	Depth to Water Detail	19.33	ft
GS-GSA-MW-14H	8/5/2020 11:01	Oxidation Reduction Potention	292.19	mv
GS-GSA-MW-14H	8/5/2020 11:01	рН	3.83	pН
GS-GSA-MW-14H	8/5/2020 11:01	Temperature	20.84	С
GS-GSA-MW-14H	8/5/2020 11:01	Turbidity	2.92	NTU
GS-GSA-MW-14H	8/5/2020 11:06	Conductivity	1379.37	uS/cm
GS-GSA-MW-14H	8/5/2020 11:06	DO	0.29	mg/L
GS-GSA-MW-14H	8/5/2020 11:06	Depth to Water Detail	19.33	
GS-GSA-MW-14H	8/5/2020 11:06	Oxidation Reduction Potention	291.85	mv
GS-GSA-MW-14H	8/5/2020 11:06	рН	3.83	рН
GS-GSA-MW-14H	8/5/2020 11:06	Temperature	20.84	С
GS-GSA-MW-14H	8/5/2020 11:06	Turbidity	2.93	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-4	8/5/2020 11:40	Conductivity	1149.15	uS/cm
GS-GSA-MW-4	8/5/2020 11:40	DO	0.37	mg/L
GS-GSA-MW-4	8/5/2020 11:40	Depth to Water Detail	92.56	ft
GS-GSA-MW-4	8/5/2020 11:40	Oxidation Reduction Potention	307.47	mv
GS-GSA-MW-4	8/5/2020 11:40	рН	3.83	рН
GS-GSA-MW-4	8/5/2020 11:40	Temperature	21.52	С
GS-GSA-MW-4	8/5/2020 11:40	Turbidity	22	NTU
GS-GSA-MW-4	8/5/2020 11:45	Conductivity	1151.93	uS/cm
GS-GSA-MW-4	8/5/2020 11:45	DO	0.31	mg/L
GS-GSA-MW-4	8/5/2020 11:45	Depth to Water Detail	92.61	ft
GS-GSA-MW-4	8/5/2020 11:45	Oxidation Reduction Potention	307.01	mv
GS-GSA-MW-4	8/5/2020 11:45	рН	3.84	рН
GS-GSA-MW-4	8/5/2020 11:45	Temperature	21.47	С
GS-GSA-MW-4	8/5/2020 11:45	Turbidity	18.1	NTU
GS-GSA-MW-4	8/5/2020 11:50	Conductivity	1151.48	uS/cm
GS-GSA-MW-4	8/5/2020 11:50	DO	0.28	mg/L
GS-GSA-MW-4	8/5/2020 11:50	Depth to Water Detail	92.61	ft
GS-GSA-MW-4	8/5/2020 11:50	Oxidation Reduction Potention	306.2	mv
GS-GSA-MW-4	8/5/2020 11:50	рН	3.85	рН
GS-GSA-MW-4	8/5/2020 11:50	Temperature	21.42	С
GS-GSA-MW-4	8/5/2020 11:50	Turbidity	11.7	NTU
GS-GSA-MW-4	8/5/2020 11:55	Conductivity	1152.76	uS/cm
GS-GSA-MW-4	8/5/2020 11:55	DO	0.27	mg/L
GS-GSA-MW-4	8/5/2020 11:55	Depth to Water Detail	92.61	ft
GS-GSA-MW-4	8/5/2020 11:55	Oxidation Reduction Potention	305.7	mv
GS-GSA-MW-4	8/5/2020 11:55	рН	3.85	рН
GS-GSA-MW-4	8/5/2020 11:55	Temperature	21.51	С
GS-GSA-MW-4	8/5/2020 11:55	Turbidity	11.77	NTU
GS-GSA-MW-4	8/5/2020 12:00	Conductivity	1156.44	uS/cm
GS-GSA-MW-4	8/5/2020 12:00	DO	0.27	mg/L
GS-GSA-MW-4	8/5/2020 12:00	Depth to Water Detail	92.61	
GS-GSA-MW-4	8/5/2020 12:00	Oxidation Reduction Potention	304.93	mv
GS-GSA-MW-4	8/5/2020 12:00	рН	3.86	pН
GS-GSA-MW-4	8/5/2020 12:00	Temperature	21.55	С
GS-GSA-MW-4	8/5/2020 12:00	Turbidity	10.07	NTU
GS-GSA-MW-4	8/5/2020 12:05	Conductivity	1150.86	uS/cm
GS-GSA-MW-4	8/5/2020 12:05	DO	0.27	mg/L
GS-GSA-MW-4	8/5/2020 12:05	Depth to Water Detail	92.61	ft
GS-GSA-MW-4	8/5/2020 12:05	Oxidation Reduction Potention	304.37	mv
GS-GSA-MW-4	8/5/2020 12:05	рН	3.86	рН
GS-GSA-MW-4	8/5/2020 12:05	Temperature	21.53	С
GS-GSA-MW-4	8/5/2020 12:05	Turbidity	8.94	NTU

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-4V	8/5/2020 12:45	Conductivity	1472.99	uS/cm
GS-GSA-MW-4V	8/5/2020 12:45	DO	0.7	mg/L
GS-GSA-MW-4V	8/5/2020 12:45	Depth to Water Detail	119.92	ft
GS-GSA-MW-4V	8/5/2020 12:45	Oxidation Reduction Potention	34.26	mv
GS-GSA-MW-4V	8/5/2020 12:45	рН	5.81	pН
GS-GSA-MW-4V	8/5/2020 12:45	Temperature	21.63	С
GS-GSA-MW-4V	8/5/2020 12:45	Turbidity	11.49	NTU
GS-GSA-MW-4V	8/5/2020 12:50	Conductivity	1433.6	uS/cm
GS-GSA-MW-4V	8/5/2020 12:50	DO	0.5	mg/L
GS-GSA-MW-4V	8/5/2020 12:50	Depth to Water Detail	120.15	ft
GS-GSA-MW-4V	8/5/2020 12:50	Oxidation Reduction Potention	33.48	mv
GS-GSA-MW-4V	8/5/2020 12:50	рН	5.83	pН
GS-GSA-MW-4V	8/5/2020 12:50	Temperature	21.64	С
GS-GSA-MW-4V	8/5/2020 12:50	Turbidity	11.28	NTU
GS-GSA-MW-4V	8/5/2020 12:55	Conductivity	1411.37	uS/cm
GS-GSA-MW-4V	8/5/2020 12:55	DO	0.45	mg/L
GS-GSA-MW-4V	8/5/2020 12:55	Depth to Water Detail	120.33	ft
GS-GSA-MW-4V	8/5/2020 12:55	Oxidation Reduction Potention	33.19	mv
GS-GSA-MW-4V	8/5/2020 12:55	1	5.83	
GS-GSA-MW-4V	8/5/2020 12:55	Temperature	21.93	С
GS-GSA-MW-4V	8/5/2020 12:55	Turbidity	9.57	NTU
GS-GSA-MW-4V	8/5/2020 13:00	Conductivity	1386.95	uS/cm
GS-GSA-MW-4V	8/5/2020 13:00	DO	0.44	mg/L
GS-GSA-MW-4V	8/5/2020 13:00	Depth to Water Detail	120.35	ft
GS-GSA-MW-4V		Oxidation Reduction Potention	35.35	mv
GS-GSA-MW-4V	8/5/2020 13:00		5.81	рН
GS-GSA-MW-4V	8/5/2020 13:00	Temperature	21.7	С
GS-GSA-MW-4V	8/5/2020 13:00	Turbidity	9.04	NTU

Appendix C

1st Semi-Annual Monitoring Event

Interwell Prediction Limits - Significant Results

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:36 PM

Constituent	<u>Well</u>	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
Boron (mg/L)	GS-GSA-MW-3	0.0596	n/a	2/3/2020	2.13	Yes	83	15.66	n/a	0.000	NP Inter (normality)
Boron (mg/L)	GS-GSA-MW-4	0.0596	n/a	2/4/2020	2.74	Yes	83	15.66	n/a	0.000	NP Inter (normality)
Boron (mg/L)	GS-GSA-MW-8	0.0596	n/a	2/4/2020	1.47	Yes	83	15.66	n/a	0.000	NP Inter (normality)
Calcium (mg/L)	GS-GSA-MW-3	431	n/a	2/3/2020	589	Yes	83	0	n/a	0.000	NP Inter (normality)
Calcium (mg/L)	GS-GSA-MW-8	431	n/a	2/4/2020	461	Yes	83	0	n/a	0.000	NP Inter (normality)
Chloride (mg/L)	GS-GSA-MW-3	3.756	n/a	2/3/2020	267	Yes	83	3.614	sqrt(x)	0.002505	Param Inter 1 of 2
Chloride (mg/L)	GS-GSA-MW-4	3.756	n/a	2/4/2020	43.2	Yes	83	3.614	sqrt(x)	0.002505	Param Inter 1 of 2
Chloride (mg/L)	GS-GSA-MW-8	3.756	n/a	2/4/2020	94.1	Yes	83	3.614	sqrt(x)	0.002505	Param Inter 1 of 2

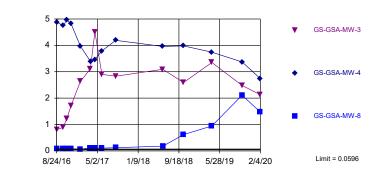
Interwell Prediction Limits - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:36 PM

Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
Boron (mg/L)	GS-GSA-MW-3	0.0596	n/a	2/3/2020	2.13	Yes	83	15.66	n/a	0.000	NP Inter (normality)
Boron (mg/L)	GS-GSA-MW-4	0.0596	n/a	2/4/2020	2.74	Yes	83	15.66	n/a	0.000	NP Inter (normality)
Boron (mg/L)	GS-GSA-MW-8	0.0596	n/a	2/4/2020	1.47	Yes	83	15.66	n/a	0.000	NP Inter (normality)
Calcium (mg/L)	GS-GSA-MW-3	431	n/a	2/3/2020	589	Yes	83	0	n/a	0.000	NP Inter (normality)
Calcium (mg/L)	GS-GSA-MW-4	431	n/a	2/4/2020	116	No	83	0	n/a	0.000	NP Inter (normality)
Calcium (mg/L)	GS-GSA-MW-8	431	n/a	2/4/2020	461	Yes	83	0	n/a	0.000	NP Inter (normality)
Chloride (mg/L)	GS-GSA-MW-3	3.756	n/a	2/3/2020	267	Yes	83	3.614	sqrt(x)	0.002505	Param Inter 1 of 2
Chloride (mg/L)	GS-GSA-MW-4	3.756	n/a	2/4/2020	43.2	Yes	83	3.614	sqrt(x)	0.002505	Param Inter 1 of 2
Chloride (mg/L)	GS-GSA-MW-8	3.756	n/a	2/4/2020	94.1	Yes	83	3.614	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-3	0.4752	n/a	2/3/2020	0.427	No	87	0	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-4	0.4752	n/a	2/4/2020	0.05ND	No	87	0	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.4752	n/a	2/4/2020	0.132	No	87	0	sqrt(x)	0.002505	Param Inter 1 of 2

Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Prediction Limit
Interwell Non-parametric



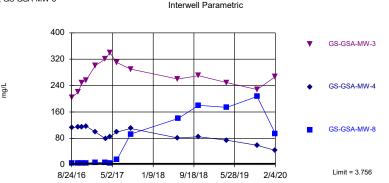
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 83 background values. 15.66% NDs. Annual perconstituent alpha = 0.001687. Individual comparison alpha = 0.0002814 (1 of 2). Comparing 3 points to limit.

Constituent: Boron Analysis Run 7/22/2020 2:32 PM View: Interwell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Prediction Limit

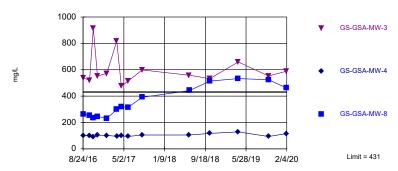


Background Data Summary (based on square root transformation): Mean=1.485, Std. Dev.=0.268, n=83, 3.614% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9668, critical = 0.96. Kappa = 1.689 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-8

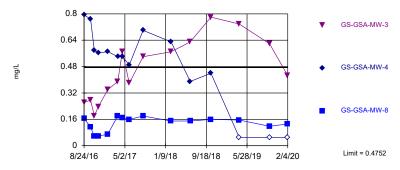
Prediction Limit
Interwell Non-parametric



Constituent: Calcium Analysis Run 7/22/2020 2:32 PM View: Interwell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit
Interwell Parametric



Background Data Summary (based on square root transformation): Mean=0.4625, Std. Dev.=0.1346, n=87. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9801, critical = 0.961. Kappa = 1.685 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit

Constituent: Boron (mg/L) Analysis Run 7/22/2020 2:36 PM View: Interwell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-3	GS-GSA-MW-8	GS-GSA-MW-4
4/25/2016	0.0414 (J)	0.028 (J)	0.0241 (J)				
4/26/2016				0.0231 (J)			
6/20/2016	0.0434 (J)		0.0284 (J)	0.0227 (J)			
6/22/2016		0.0433 (J)					
8/8/2016			0.034 (J)	0.0278 (J)			
8/9/2016	0.0453 (J)	0.0429 (J)					
8/24/2016	0.0451 (J)	0.0431 (J)	0.0316 (J)	0.0247 (J)	0.799	0.0898 (J)	4.88
10/3/2016	0.0511 (J)		0.0367 (J)	0.0307 (J)	0.889	0.0821 (J)	4.75
10/4/2016		0.04 (J)					
10/26/2016	0.0507 (J)	0.0375 (J)	0.0331 (J)	0.0241 (J)	1.23	0.0889 (J)	4.96
11/21/2016	0.0458 (J)	0.0406 (J)	0.035 (J)	0.0202 (J)	1.72	0.0788 (J)	4.82
1/17/2017			0.0259 (J)	0.0201 (J)	2.63	0.0607 (J)	3.97
1/18/2017	0.0445 (J)	0.0548 (J)					
3/20/2017					3.11	0.114	
3/21/2017							3.39
3/22/2017	0.0432 (J)	0.0344 (J)	0.0243 (J)	0.0224 (J)			
4/17/2017					4.51		3.46
4/18/2017	0.0409 (J)	<0.1	0.0206 (J)	<0.1		0.108	
5/30/2017				<0.1	2.9	0.105	3.79
5/31/2017		0.0454 (J)	0.0234 (J)				
8/23/2017	0.042 (J)	0.0425 (J)	0.0267 (J)	0.0253 (J)			
8/24/2017					2.83	0.12	4.19
5/22/2018			0.0251 (J)	0.0224 (J)			
5/23/2018	0.0433 (J)						
5/24/2018		0.0339 (J)					
6/11/2018					3.09		3.96
6/12/2018	0.0478 (J)	0.0371 (J)	0.0275 (J)	0.0214 (J)		0.181	
10/17/2018	0.0468 (J)	0.0596 (J)	0.0321 (J)	0.0216 (J)	2.59	0.616	3.98
11/19/2018	0.0526 (J)	0.0514 (J)	0.0324 (J)	0.0237 (J)			
4/10/2019	0.0438 (J)	<0.1	<0.1	0.0304 (J)	3.35	0.944	3.74
5/14/2019	<0.1	<0.1	<0.1	<0.1			
10/8/2019		0.0537 (J)	0.0371 (J)	<0.1			
10/10/2019	0.0487 (J)						
10/14/2019					2.48	2.11	3.37
10/16/2019	0.0505 (J)	0.05 (J)	0.0419 (J)	0.0385 (J)			
2/3/2020	0.0433 (J)	<0.1	<0.1	<0.1	2.13		
2/4/2020						1.47	2.74

Constituent: Calcium (mg/L) Analysis Run 7/22/2020 2:36 PM View: Interwell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-3	GS-GSA-MW-8	GS-GSA-MW-4
4/25/2016	261	224	123				
4/26/2016				147			
6/20/2016	295		168	152			
6/22/2016		266					
8/8/2016			180	150			
8/9/2016	318	260					
8/24/2016	319	274	180	142	539	263	102
10/3/2016	293		184	139	519.7	253	98.4
10/4/2016		243					
10/26/2016	311	254	171	133	916	235	88.7
11/21/2016	320	263	179	144	552	246	104
1/17/2017			188	131	572	231	102
1/18/2017	417	431					
3/20/2017					817	298	
3/21/2017							94.7
3/22/2017	292	318	155	141			
4/17/2017					476		97.9
4/18/2017	302	296	156	149		317	
5/30/2017				140	515	316	93.9
5/31/2017		306	151				
8/23/2017	297	298	155	152			
8/24/2017					598	391	105
5/22/2018			172	166			
5/23/2018	296						
5/24/2018		297					
6/11/2018					558		105
6/12/2018	355	318	179	203		442	
10/17/2018	342	392	200	171	533	514	117
11/19/2018	289	387	221	154			
4/10/2019	356	348	200	243	659	533	129
5/14/2019	254	254	168	167			
10/8/2019		371	190	157			
10/10/2019	302						
10/14/2019					552	524	93.5
10/16/2019	356	346	194	157			
2/3/2020	265	276	172	172	589		
2/4/2020						461	116

Constituent: Chloride (mg/L) Analysis Run 7/22/2020 2:36 PM View: Interwell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-3	GS-GSA-MW-8	GS-GSA-MW-4
4/25/2016	1.53	1.32	1.9				
4/26/2016				1.94			
6/20/2016	1.85		3.43	2.09			
6/22/2016		1.46					
8/8/2016			3.31	2.18			
8/9/2016	1.95	1.35					
8/24/2016	2.07	1.47	3.23	2.22	204	4.03	112
10/3/2016	2.02		3.21	2.34	220	3.87	115
10/4/2016		1.59					
10/26/2016	2.07	1.27	3.35	2.34	249	4.08	115
11/21/2016	2.39	1.38	3.34	2.5	256	4.39	117
1/17/2017			3.58	2.68	301	7.22	99.3
1/18/2017	1.9	1.34					
3/20/2017					320	5.7	
3/21/2017							79
3/22/2017	1.5 (J)	2	3.4	3.7			
4/17/2017					340		85
4/18/2017	1.6 (J)	2.2	2.6	2.4		4.7	
5/30/2017				2.6	310	15	99
5/31/2017		1.5 (J)	4.4				
8/23/2017	2.3	1.8 (J)	4.4	2.7			
8/24/2017					290	93	110
5/22/2018			3.2	2.3			
5/23/2018	2						
5/24/2018		1.6 (J)					
6/11/2018					260		81
6/12/2018	1.7 (J)	1.4 (J)	3.7	2.3		140	
10/17/2018	1.5 (J)	<2	4.6	1.7 (J)	270	180	85
11/19/2018	<2	<2	3	1.7 (J)			
4/10/2019	1.88	2.25	1.76	2.36	249	174	74.3
5/14/2019	1.82	2.28	2.98	2.28			
10/8/2019		1.36	4.26	2.31			
10/10/2019	1.93						
10/14/2019					228	207	59.1
10/16/2019	1.92	1.4	4.04	2.42			
2/3/2020	1.72	2.12	2.48	2.07	267		
2/4/2020						94.1	43.2

Constituent: Fluoride (mg/L) Analysis Run 7/22/2020 2:36 PM View: Interwell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-2 (bg)	MW-3 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	0.372	0.149 (J)	0.243 (J)				
4/26/2016				0.146 (J)			
6/20/2016	0.361	0.148 (J)		0.148 (J)			
6/22/2016			0.269 (J)				
8/8/2016		0.134 (J)		0.137 (J)			
8/9/2016	0.326		0.363				
8/24/2016	0.329	0.129 (J)	0.346	0.133 (J)	0.165 (J)	0.264 (J)	0.793
10/3/2016	0.287 (J)	0.086 (J)		0.103 (J)	0.114 (J)	0.276 (J)	0.769
10/4/2016			0.266 (J)				
10/26/2016	0.194 (J)	0.027 (J)	0.266 (J)	0.05 (J)	0.056 (J)	0.182 (J)	0.578
11/21/2016	0.192 (J)	0.027 (J)	0.244 (J)	0.047 (J)	0.059 (J)	0.238 (J)	0.562
1/17/2017		0.066 (J)		0.09 (J)	0.07 (J)	0.34	0.571
1/18/2017	0.223 (J)		0.385				
3/20/2017					0.18	0.39	
3/21/2017							0.54
3/22/2017	0.32	0.13	0.41	0.12			
4/17/2017						0.57	0.54
4/18/2017	0.32	0.16	0.29	0.12	0.17		
5/30/2017				0.13	0.16	0.38	0.49
5/31/2017		0.13	0.37				
8/23/2017	0.38	0.16	0.55	0.16			
8/24/2017					0.18	0.54	0.7
2/13/2018	0.38 (D)	0.22 (D)	0.27 (D)	0.14 (D)	0.15 (D)	0.57 (D)	0.63 (D)
5/22/2018		0.17		0.16			
5/23/2018	0.38						
5/24/2018			0.6				
6/11/2018						0.63	0.39
6/12/2018	0.39	0.16	0.53	0.16	0.15		
10/17/2018	0.39	0.16	0.63	0.18	0.16	0.78	0.44
11/19/2018	0.36	0.18	0.31	0.15			
4/10/2019	0.384	0.262	0.273	0.102	0.156	0.738	<0.1
5/14/2019	0.335	0.17	0.281	0.119			
10/8/2019		0.164	0.225	0.0924 (J)			
10/10/2019	0.304						
10/14/2019					0.118	0.619	<0.1
	0.202	0.114	0.106	0.0756 (J)			
10/16/2019	0.302	0.114	0.100	(-)			
10/16/2019 2/3/2020	0.302	0.114	0.256	0.0982 (J)		0.427	

Intrawell Prediction Limits - Significant Results

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:42 PM

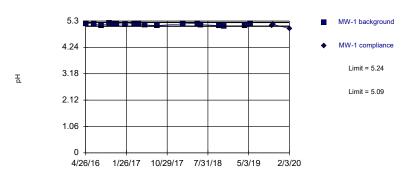
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	<u>Bg N</u>	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
nH (nH)	MW-1	5.24	5.09	2/3/2020	5	Yes	18	0	No	0.001253	Param Intra 1 of 2

Intrawell Prediction Limits - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
pH (pH)	MW-1	5.24	5.09	2/3/2020	5	Yes	18	0	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-2	6.161	5.76	2/3/2020	5.95	No	18	0	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-3	6.175	4.135	2/3/2020	5.54	No	19	0	x^2	0.001253	Param Intra 1 of 2
pH (pH)	MW-4	6.246	6.063	2/3/2020	6.14	No	18	0	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-3	6.454	5.609	2/3/2020	5.98	No	13	0	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-4	3.868	3.701	2/4/2020	3.83	No	13	0	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-8	7.202	6.366	2/4/2020	6.85	No	13	0	No	0.001253	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	2100	n/a	2/3/2020	1510	No	18	0	n/a	0.005373	NP Intra (normality)
Sulfate (mg/L)	MW-2	1247	n/a	2/3/2020	803	No	18	0	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3164	n/a	2/3/2020	2290	No	18	0	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3023	n/a	2/3/2020	1920	No	17	0	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-3	3089	n/a	2/3/2020	2840	No	12	0	x^5	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-4	648.7	n/a	2/4/2020	571	No	12	0	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-8	2123	n/a	2/4/2020	1570	No	12	0	No	0.002505	Param Intra 1 of 2
Total dissolved solids	MW-1	2526	n/a	2/3/2020	2380	No	18	0	No	0.002505	Param Intra 1 of 2
Total dissolved solids	MW-2	2032	n/a	2/3/2020	1440	No	18	0	No	0.002505	Param Intra 1 of 2
Total dissolved solids	MW-3	4874	n/a	2/3/2020	3530	No	18	0	No	0.002505	Param Intra 1 of 2
Total dissolved solids	MW-4	4639	n/a	2/3/2020	3240	No	17	0	No	0.002505	Param Intra 1 of 2
Total dissolved solids	GS-GSA-MW-3	5416	n/a	2/3/2020	4920	No	12	0	x^6	0.002505	Param Intra 1 of 2
Total dissolved solids	GS-GSA-MW-4	1100	n/a	2/4/2020	978	No	12	0	No	0.002505	Param Intra 1 of 2
Total dissolved solids	GS-GSA-MW-8	4264	n/a	2/4/2020	3190	No	8	0	No	0.002505	Param Intra 1 of 2

Exceeds Limits Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=5.165, Std. Dev.=0.03869, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8696, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 7/22/2020 2:38 PM View: Intrawell PL
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Within Limits

Prediction Limit
Intrawell Parametric

MW-3 background

MW-3 compliance

Limit = 6.175

Limit = 4.135

Background Data Summary (based on square transformation): Mean=27.62, Std. Dev.=5.502, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8755, critical = 0.863. Kappa = 1.912 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

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Within Limits Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=5.961, Std. Dev.=0.1039, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9465, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 7/22/2020 2:38 PM View: Intrawell PL
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Within Limits

Prediction Limit
Intrawell Parametric

MW-4 background

MW-4 compliance

Limit = 6.246

Limit = 6.063

Background Data Summary: Mean=6.154, Std. Dev.=0.04755, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9068, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

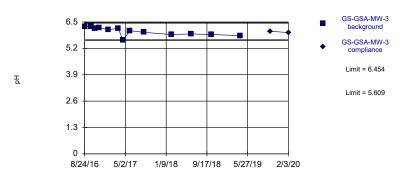
	MW-1	MW-1
4/26/2016	5.2	
6/20/2016	5.18	
8/8/2016	5.12	
10/3/2016	5.21 (D)	
10/26/2016	5.2	
11/21/2016	5.19 (D)	
1/17/2017	5.17 (D)	
3/22/2017	5.2 (D)	
4/18/2017	5.2	
5/30/2017	5.14 (D)	
8/23/2017	5.12 (D)	
2/13/2018	5.18	
5/22/2018	5.2	
6/12/2018	5.15	
10/17/2018	5.12	
11/19/2018	5.09 (D)	
4/10/2019	5.11	
5/14/2019	5.19	
10/8/2019		5.12
10/16/2019		5.16
2/3/2020		5

	MW-2	MW-2
4/25/2016	5.94	
6/20/2016	5.96	
8/8/2016	5.88	
10/3/2016	5.91 (D)	
10/26/2016	5.84	
11/21/2016	5.82 (D)	
1/17/2017	5.87 (D)	
3/22/2017	6.01 (D)	
4/18/2017	6.02	
5/31/2017	5.85 (D)	
8/23/2017	5.89 (D)	
2/13/2018	6.21	
5/22/2018	6.04	
6/12/2018	5.95	
10/17/2018	5.9	
11/19/2018	6.03 (D)	
4/10/2019	6.1	
5/14/2019	6.07	
10/8/2019		5.96
10/16/2019		5.98
2/3/2020		5.95

	MW-3	MW-3
4/25/2016	5.56	
6/22/2016	5.57	
8/9/2016	5.67	
8/24/2016	5.63	
10/4/2016	5.69 (D)	
10/26/2016	5.56	
11/21/2016	5.42 (D)	
1/18/2017	5.11 (D)	
3/22/2017	4.52 (D)	
4/18/2017	5.84	
5/31/2017	4.56 (D)	
8/23/2017	4.77 (D)	
2/13/2018	5.67	
5/24/2018	5.19	
6/12/2018	4.79	
10/17/2018	4.75	
11/19/2018	3.77 (D)	
4/10/2019	5.54	
5/14/2019	5.71	
10/8/2019		4.98
10/16/2019		4.51
2/3/2020		5.54

	MW-4	MW-4
4/25/2016	6.22	
6/20/2016	6.21	
8/9/2016	6.11	
8/24/2016	6.11	
10/3/2016	6.13 (D)	
10/26/2016	6.12	
11/21/2016	6.09 (D)	
1/18/2017	6.09 (D)	
3/22/2017	6.15 (D)	
4/18/2017	6.19	
8/23/2017	6.12	
2/13/2018	6.22	
5/23/2018	6.21	
6/12/2018	6.16	
10/17/2018	6.12	
11/19/2018	6.16 (D)	
4/10/2019	6.14	
5/14/2019	6.23	
10/10/2019		6.15
10/16/2019		6.19
2/3/2020		6.14

Prediction Limit Within Limits Intrawell Parametric



Background Data Summary: Mean=6.032, Std. Dev.=0.2034, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9319, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha =

> Constituent: pH Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Prediction Limit Within Limits Intrawell Parametric GS-GSA-MW-8 background GS-GSA-MW-8 5.84 compliance Limit = 7.202 4.38 Ħ Limit = 6.366 2.92 1.46

5/2/17

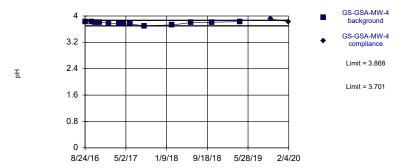
8/24/16

1/9/18

Background Data Summary: Mean=6.784, Std. Dev.=0.2012, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8769, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha =

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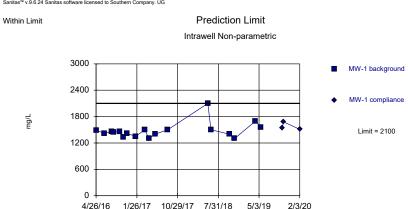




Background Data Summary: Mean=3.785, Std. Dev.=0.04034, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9065, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha =

> Constituent: pH Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 18 background values. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

9/18/18 5/28/19

2/4/20

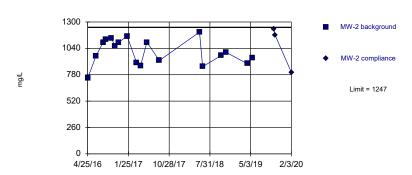
	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	6.28	
10/3/2016	6.28	
10/26/2016	6.19	
11/21/2016	6.2	
1/17/2017	6.13	
3/20/2017	6.17	
4/17/2017	5.6	
5/30/2017	6.07	
8/24/2017	5.99	
2/13/2018	5.88	
6/11/2018	5.91	
10/17/2018	5.88	
4/10/2019	5.83	
10/14/2019		6.04
2/3/2020		5.98

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	3.83 (E)	
10/3/2016	3.82 (E)	
10/26/2016	3.81 (E)	
11/21/2016	3.81	
1/17/2017	3.78	
3/21/2017	3.76	
4/17/2017	3.76	
5/30/2017	3.76	
8/24/2017	3.7	
2/13/2018	3.73	
6/11/2018	3.8	
10/17/2018	3.81	
4/10/2019	3.83	
10/14/2019		3.91
2/4/2020		3.83

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	6.78	
10/3/2016	6.71	
10/26/2016	6.65	
11/21/2016	6.7	
1/17/2017	6.25	
3/20/2017	7.04	
4/18/2017	6.99	
5/30/2017	6.98	
8/24/2017	6.89	
2/13/2018	6.85	
6/12/2018	6.83	
10/17/2018	6.81	
4/10/2019	6.71	
10/14/2019		6.88
2/4/2020		6.85

	MW-1	MW-1
4/26/2016	1490	
6/20/2016	1420	
8/8/2016	1460	
8/24/2016	1450	
10/3/2016	1460	
10/26/2016	1330	
11/21/2016	1420	
1/17/2017	1350	
3/22/2017	1500	
4/18/2017	1300	
5/30/2017	1400	
8/23/2017	1500	
5/22/2018	2100	
6/12/2018	1500	
10/17/2018	1400	
11/19/2018	1300	
4/10/2019	1700	
5/14/2019	1560	
10/8/2019		1540
10/16/2019		1680
2/3/2020		1510

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=1003, Std. Dev.=126.2, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.00505

Constituent: Sulfate Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Within Limit Prediction Limit Intrawell Parametric

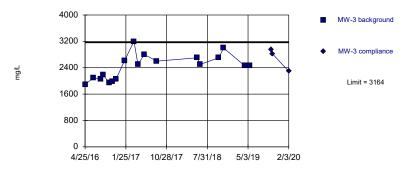
4000
3200
4000
MW-4 background
MW-4 compliance
Limit = 3023

Background Data Summary: Mean=2558, Std. Dev.=238.2, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.963, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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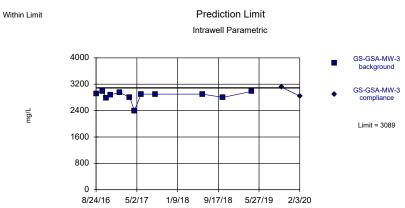
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2431, Std. Dev.=379.6, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9476, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.02508

Constituent: Sulfate Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Background Data Summary (based on x⁻⁵ transformation): Mean=1.9e17, Std. Dev.=4.2e16, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8091, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

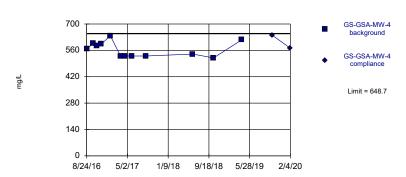
	MW-2	MW-2
4/25/2016	745	
6/20/2016	964	
8/8/2016	1100	
8/24/2016	1130	
10/3/2016	1140	
10/26/2016	1060	
11/21/2016	1100	
1/17/2017	1160	
3/22/2017	900	
4/18/2017	870	
5/31/2017	1100	
8/23/2017	920	
5/22/2018	1200	
6/12/2018	860	
10/17/2018	970	
11/19/2018	1000	
4/10/2019	889	
5/14/2019	948	
10/8/2019		1230
10/16/2019		1170
2/3/2020		803

	MW-3	MW-3
4/25/2016	1890	
6/22/2016	2100	
8/9/2016	2050	
8/24/2016	2190	
10/4/2016	1950	
10/26/2016	1980	
11/21/2016	2060	
1/18/2017	2620	
3/22/2017	3200	
4/18/2017	2500	
5/31/2017	2800	
8/23/2017	2600	
5/24/2018	2700	
6/12/2018	2500	
10/17/2018	2700	
11/19/2018	3000	
4/10/2019	2460	
5/14/2019	2460	
10/8/2019		2950
10/16/2019		2820
2/3/2020		2290

	MW-4	MW-4
4/25/2016	2260	
6/20/2016	2500	
8/9/2016	2750	
8/24/2016	2770	
10/3/2016	3060	
10/26/2016	2650	
11/21/2016	2720	
1/18/2017	2650	
3/22/2017	2700	
4/18/2017	2400	
8/23/2017	2700	
5/23/2018	2400	
6/12/2018	2600	
10/17/2018	2600	
11/19/2018	2400	
4/10/2019	2090	
5/14/2019	2240	
10/10/2019		2690
10/16/2019		3050
2/3/2020		1920

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	2910	
10/3/2016	2980	
10/26/2016	2790	
11/21/2016	2880	
1/17/2017	2950	
3/20/2017	2800	
4/17/2017	2400	
5/30/2017	2900	
8/24/2017	2900	
6/11/2018	2900	
10/17/2018	2800	
4/10/2019	2980	
10/14/2019		3110
2/3/2020		2840

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=564.5, Std. Dev.=39.86, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8799, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.005132).

Constituent: Sulfate Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Within Limit Prediction Limit
Intrawell Parametric

4000

4000

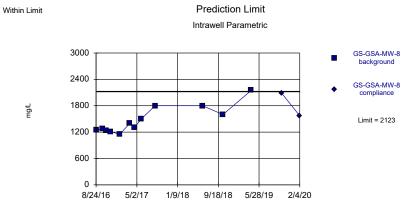
MW-1 background

MW-1 compliance

Limit = 2526

Background Data Summary: Mean=2183, Std. Dev.=178, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9142, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

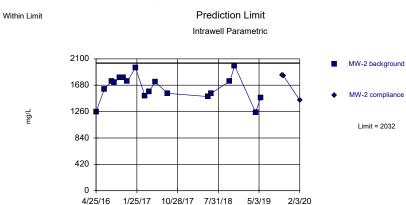
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Background Data Summary: Mean=1473, Std. Dev.=307.9, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8741, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Background Data Summary: Mean=1640, Std. Dev.=202.8, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.952, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

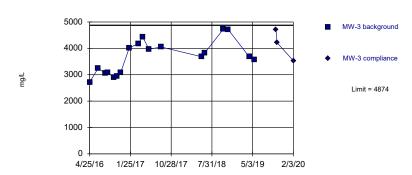
	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	567	
10/3/2016	596	
10/26/2016	585	
11/21/2016	593	
1/17/2017	637	
3/21/2017	530	
4/17/2017	530	
5/30/2017	530	
8/24/2017	530	
6/11/2018	540	
10/17/2018	520	
4/10/2019	616	
10/14/2019		641
2/4/2020		571

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	1250	
10/3/2016	1270	
10/26/2016	1240	
11/21/2016	1210	
1/17/2017	1150	
3/20/2017	1400	
4/18/2017	1300	
5/30/2017	1500	
8/24/2017	1800	
6/12/2018	1800	
10/17/2018	1600	
4/10/2019	2150	
10/14/2019		2090
2/4/2020		1570

	MW-1	MW-1
4/26/2016	2080	
6/20/2016	2060	
8/8/2016	2070	
8/24/2016	2040	
10/3/2016	2110	
10/26/2016	2000	
11/21/2016	2070	
1/17/2017	1930	
3/22/2017	2060	
4/18/2017	2140	
5/30/2017	2240	
8/23/2017	2160	
5/22/2018	2380	
6/12/2018	2400	
10/17/2018	2220	
11/19/2018	2360	
4/10/2019	2630	
5/14/2019	2340 (D)	
10/8/2019		2330
10/16/2019		3650
2/3/2020		2380

	MW-2	MW-2
4/25/2016	1260	
6/20/2016	1620	
8/8/2016	1740	
8/24/2016	1720	
10/3/2016	1800	
10/26/2016	1800	
11/21/2016	1740	
1/17/2017	1960	
3/22/2017	1510	
4/18/2017	1580	
5/31/2017	1730	
8/23/2017	1550	
5/22/2018	1500	
6/12/2018	1550	
10/17/2018	1740	
11/19/2018	1990	
4/10/2019	1250	
5/14/2019	1480	
10/8/2019		1840
10/16/2019		1830
2/3/2020		1440

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=3661, Std. Dev.=628.6, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9455, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.005132).

Constituent: Total dissolved solids Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

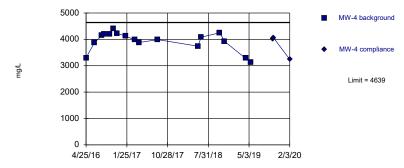
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Prediction Limit Within Limit Intrawell Parametric 6000 GS-GSA-MW-3 background 4800 GS-GSA-MW-3 compliance 3600 Limit = 5416 2400 1200 5/2/17 1/9/18 9/17/18 5/27/19 8/24/16 2/3/20

Background Data Summary (based on x^6 transformation): Mean=1.4e22, Std. Dev.=5.4e21, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8255, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.00132). Report alpha = 0.002505.

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Background Data Summary: Mean=3923, Std. Dev.=367.3, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8694, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 7/22/2020 2:38 PM View: Intrawell PL Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Prediction Limit Within Limit Intrawell Parametric 1100 GS-GSA-MW-4 background 880 GS-GSA-MW-4 compliance 660 Limit = 1100 440 220 5/2/17 1/9/18 9/18/18 5/28/19 8/24/16 2/4/20

Background Data Summary: Mean=990.3, Std. Dev.=51.88, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9383, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

	MW-3	MW-3
4/25/2016	2720	
6/22/2016	3250	
8/9/2016	3050	
8/24/2016	3080	
10/4/2016	2900	
10/26/2016	2940	
11/21/2016	3090	
1/18/2017	4020	
3/22/2017	4180	
4/18/2017	4440	
5/31/2017	3970	
8/23/2017	4050	
5/24/2018	3680	
6/12/2018	3820	
10/17/2018	4730	
11/19/2018	4710	
4/10/2019	3680	
5/14/2019	3580 (D)	
10/8/2019		4720
10/16/2019		4210
2/3/2020		3530

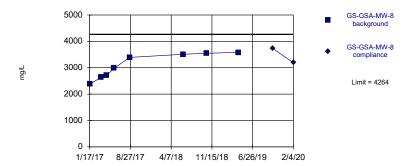
		MW-4	MW-4
4/2	25/2016	3300	
6/2	20/2016	3870	
8/9	9/2016	4140	
8/2	24/2016	4190	
10	/3/2016	4190	
10	/26/2016	4400	
11	/21/2016	4230	
1/	18/2017	4120	
3/2	22/2017	3980	
4/	18/2017	3880	
8/2	23/2017	3990	
5/2	23/2018	3740	
6/	12/2018	4080	
10	/17/2018	4250	
11	/19/2018	3920	
4/	10/2019	3280	
5/	14/2019	3130 (D)	
10	/10/2019		4000
10	/16/2019		4060
2/3	3/2020		3240

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	5020	
10/3/2016	4880	
10/26/2016	5020	
11/21/2016	5090	
1/17/2017	4330	
3/20/2017	2690	
4/17/2017	4780	
5/30/2017	5170	
8/24/2017	5140	
6/11/2018	4960	
10/17/2018	4910	
4/10/2019	5090	
10/14/2019		5110
2/3/2020		4920

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	992	
10/3/2016	988	
10/26/2016	1030	
11/21/2016	1020	
1/17/2017	988	
3/21/2017	990	
4/17/2017	884	
5/30/2017	1060	
8/24/2017	1060	
6/11/2018	944	
10/17/2018	928	
4/10/2019	1000	
10/14/2019		967
2/4/2020		978

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Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=3090, Std. Dev.=477.8, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8736, critical = 0.749. Kappa = 0.458 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

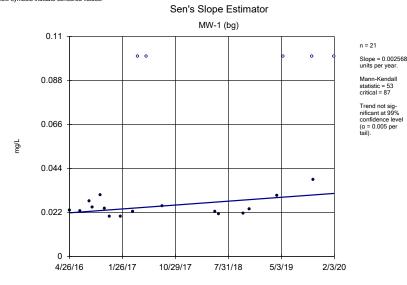


	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	2280	
10/3/2016	2370	
10/26/2016	2350	
11/21/2016	2530	
1/17/2017	2380	
3/20/2017	2630	
4/18/2017	2700	
5/30/2017	2980	
8/24/2017	3390	
6/12/2018	3510	
10/17/2018	3550	
4/10/2019	3580	
10/14/2019		3730
2/4/2020		3190

Trend Tests - All Results

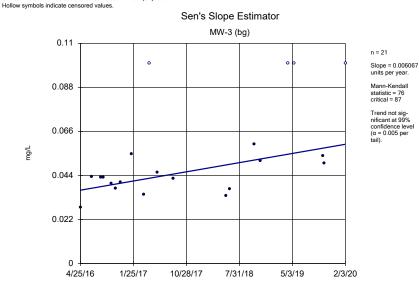
	Plant William C Gorgas	Client: Sout	hern Compa	ny Data: Go	orgas G	SA Prir	nted 6/5/2	020, 7:56 AM			
Constituent	Well	<u>Slope</u>	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	MW-1 (bg)	0.002568	53	87	No	21	23.81	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0.004087	73	87	No	21	14.29	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0.006067	76	87	No	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	0.000	11	81	No	20	5	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-3	0.4213	29	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-4	-0.4681	-51	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-8	0.245	65	48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	7.945	96	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	6.552	54	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	30.31	84	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	1.455	10	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	6.525	8	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-8	106.9	63	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-1 (bg)	0.00808	11	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	0.1451	11	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.05083	42	87	No	21	9.524	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.04231	-28	-81	No	20	5	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	5.498	10	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	-16.85	-59	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-8	53.28	73	48	Yes	14	0	n/a	n/a	0.01	NP
pH (pH)	MW-1 (bg)	-0.02212	-88	-87	Yes	21	0	n/a	n/a	0.01	NP
pH (pH)	MW-2 (bg)	0.03299	64	87	No	21	0	n/a	n/a	0.01	NP
pH (pH)	MW-3 (bg)	-0.1779	-62	-92	No	22	0	n/a	n/a	0.01	NP
pH (pH)	MW-4 (bg)	0.008085	33	87	No	21	0	n/a	n/a	0.01	NP

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Constituent: Boron Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

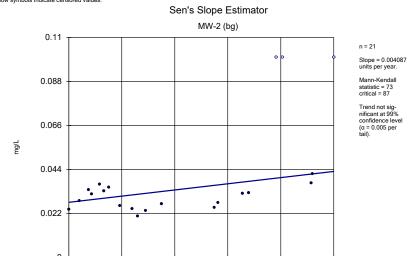
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Constituent: Boron Analysis Run 6/5/2020 7:55 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Constituent: Boron Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

7/31/18

5/3/19

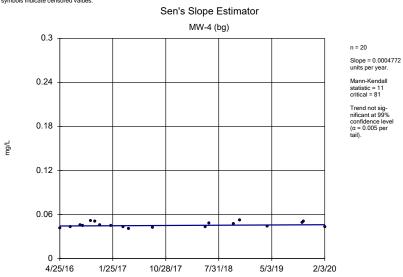
2/3/20

Sanitas™ v.9.5.15 Sanitas software licensed to Southern Company. UG Hollow symbols indicate censored values.

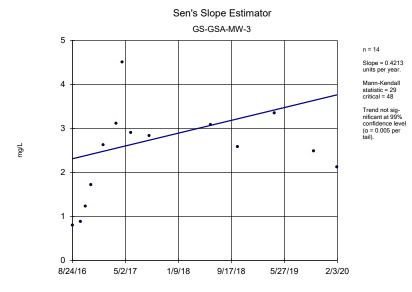
4/25/16

1/25/17

10/28/17

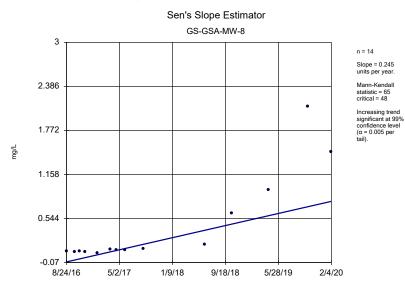


Constituent: Boron Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

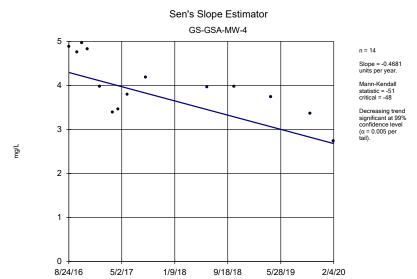


Constituent: Boron Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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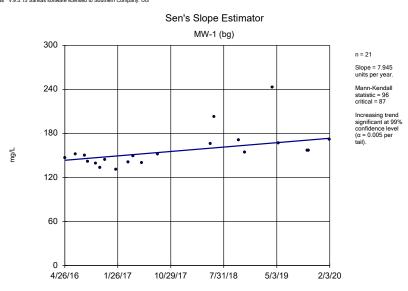


Constituent: Boron Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

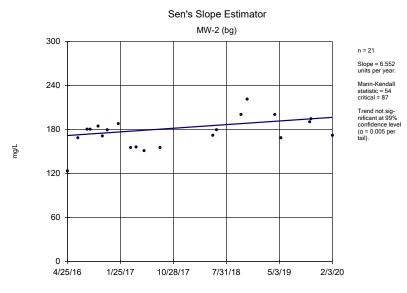


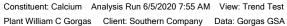
Constituent: Boron Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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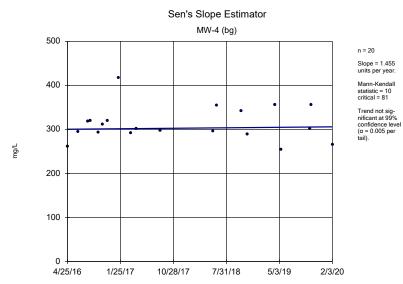


Constituent: Calcium Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

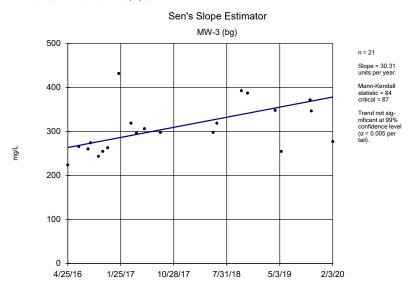




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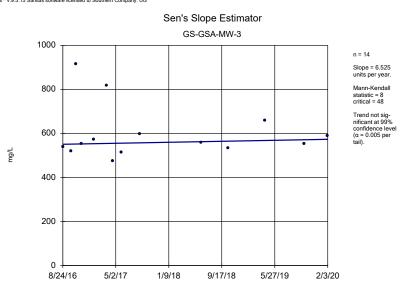


Constituent: Calcium Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

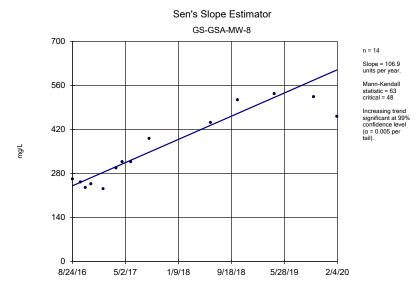


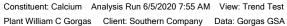
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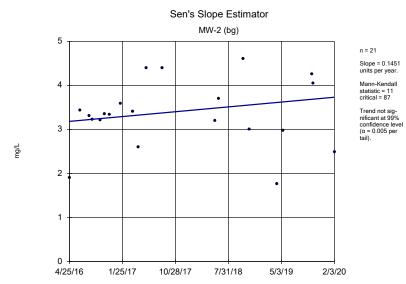


Constituent: Calcium Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

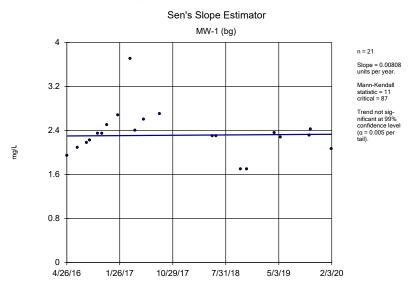




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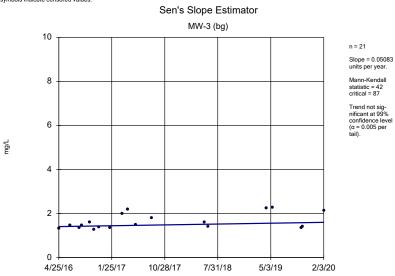


Constituent: Chloride Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

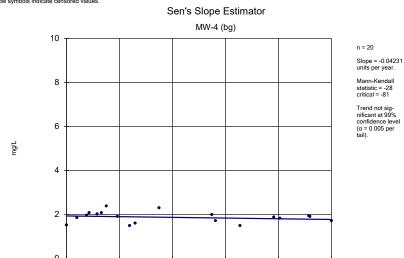


Constituent: Chloride Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Constituent: Chloride Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Chloride Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

7/31/18

5/3/19

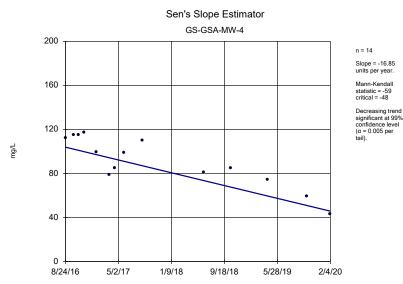
2/3/20

10/28/17

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4/25/16

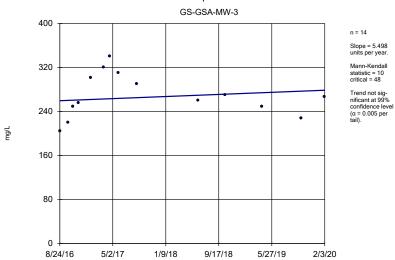
1/25/17



Constituent: Chloride Analysis Run 6/5/2020 7:55 AM View: Trend Test

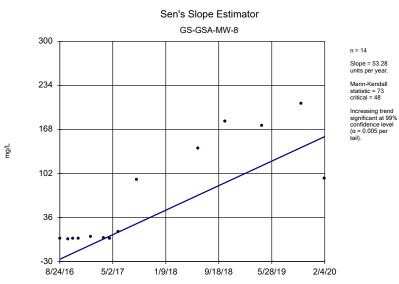
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA



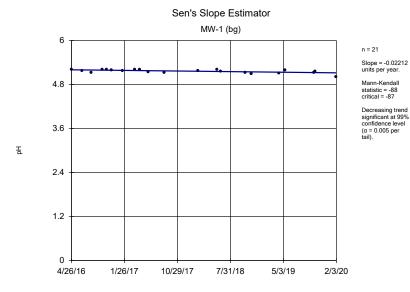


Constituent: Chloride Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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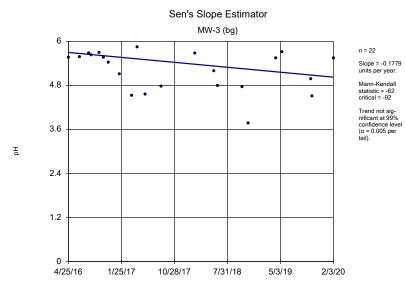


Constituent: Chloride Analysis Run 6/5/2020 7:55 AM View: Trend Test Plant William C Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: pH Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Constituent: pH Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA



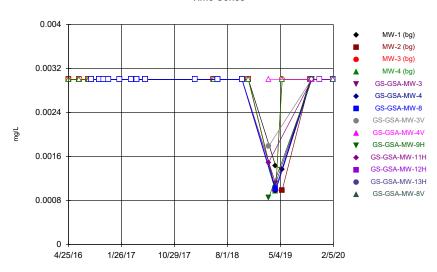
Constituent: pH Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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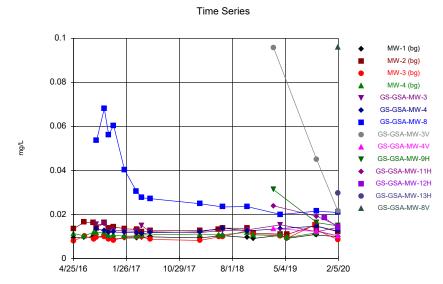
Constituent: pH Analysis Run 6/5/2020 7:55 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



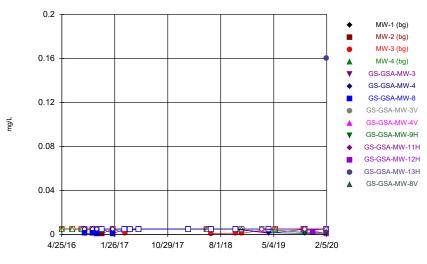
Constituent: Antimony Analysis Run 7/22/2020 2:44 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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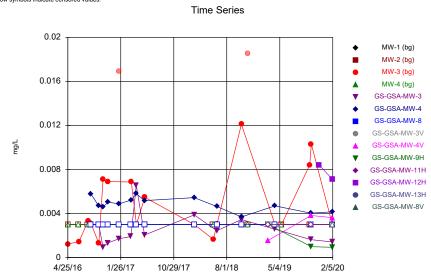
Constituent: Barium Analysis Run 7/22/2020 2:44 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



Constituent: Arsenic Analysis Run 7/22/2020 2:44 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Constituent: Beryllium Analysis Run 7/22/2020 2:44 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		<0.003	<0.003	< 0.003					
4/26/2016	<0.003								
6/20/2016	<0.003	<0.003		< 0.003					
6/22/2016			<0.003						
8/8/2016	<0.003	<0.003							
8/9/2016			<0.003	< 0.003					
8/24/2016	<0.003	<0.003	<0.003	< 0.003	<0.003	<0.003	<0.003		
10/3/2016	<0.003	<0.003		<0.003	<0.003	<0.003	<0.003		
10/4/2016			<0.003						
10/26/2016	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		
11/21/2016	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		
1/17/2017	<0.003	<0.003			<0.003	<0.003	<0.003		
1/18/2017			<0.003	<0.003					
3/20/2017					<0.003		<0.003		
3/21/2017						<0.003			
3/22/2017	<0.003	<0.003	<0.003	<0.003					
4/17/2017					<0.003	<0.003			
4/18/2017	<0.003	<0.003	<0.003	<0.003			<0.003		
5/30/2017	<0.003				<0.003	<0.003	<0.003		
5/31/2017		<0.003	<0.003						
2/13/2018	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		
5/22/2018	<0.003	<0.003							
5/23/2018				<0.003					
5/24/2018			<0.003						
6/11/2018					<0.003	<0.003			
6/12/2018	<0.003	<0.003	<0.003	<0.003			<0.003		
10/17/2018	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		
11/19/2018	<0.003	<0.003	<0.003	<0.003					
3/4/2019									
3/5/2019								0.00179 (J)	<0.003
4/10/2019	0.00143 (J)	0.000993 (J)	0.000978 (J)	0.00097 (J)	0.00111 (J)	0.000976 (J)	0.00102 (J)		
5/14/2019	0.00137 (J)	0.000989 (J)	<0.003	<0.003					
10/8/2019	<0.003	<0.003	<0.003						
10/10/2019				<0.003					
10/14/2019	.0.000				<0.003	<0.003	<0.003	<0.003	<0.003
10/16/2019	<0.003	<0.003	<0.003	<0.003					
11/26/2019	10.000	-0.000	-0.000	-0.000	-0.000			10.000	-0.000
2/3/2020	<0.003	<0.003	<0.003	<0.003	<0.003	z0.002	-0.002	<0.003	<0.003
2/4/2020						<0.003	<0.003		
2/5/2020									

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11	H GS-GSA-MW-12	H GS-GSA-MW-13	H GS-GSA-MW-8	BV .		
4/25/2016								
4/26/2016								
6/20/2016								
6/22/2016								
8/8/2016								
8/9/2016								
8/24/2016								
10/3/2016								
10/4/2016								
10/26/2016								
11/21/2016								
1/17/2017								
1/18/2017								
3/20/2017								
3/21/2017								
3/22/2017								
4/17/2017								
4/18/2017								
5/30/2017								
5/31/2017								
2/13/2018								
5/22/2018								
5/23/2018								
5/24/2018								
6/11/2018								
6/12/2018								
10/17/2018								
11/19/2018								
3/4/2019		0.00149 (J)						
3/5/2019	0.000852 (J)							
4/10/2019								
5/14/2019								
10/8/2019								
10/10/2019								
10/14/2019								
10/16/2019	<0.003	<0.003						
11/26/2019			<0.003					
2/3/2020								
2/4/2020	<0.003	<0.003	<0.003	<0.003				
2/5/2020					< 0.003			

Constituent: Arsenic (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		<0.005	<0.005	<0.005					
4/26/2016	<0.005								
6/20/2016	<0.005	<0.005		<0.005					
6/22/2016			<0.005						
8/8/2016	<0.005	<0.005							
8/9/2016			<0.005	<0.005					
8/24/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00119 (J)		
10/3/2016	<0.005	<0.005		<0.005	<0.005	<0.005	0.00114 (J)		
10/4/2016			<0.005						
10/26/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0011 (J)		
11/21/2016	<0.005	0.00111 (J)	<0.005	<0.005	<0.005	<0.005	<0.005		
1/17/2017	<0.005	<0.005			<0.005	<0.005	0.00103 (J)		
1/18/2017			<0.005	<0.005					
3/20/2017					<0.005		<0.005		
3/21/2017						<0.005			
3/22/2017	<0.005	<0.005	0.00122 (J)	<0.005					
4/17/2017					0.00405 (J)	<0.005			
4/18/2017	<0.005	<0.005	<0.005	<0.005			<0.005		
5/30/2017	<0.005				<0.005	<0.005	<0.005		
5/31/2017		<0.005	<0.005						
2/13/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
5/22/2018	<0.005	<0.005							
5/23/2018				<0.005					
5/24/2018			<0.005						
6/11/2018					<0.005	<0.005			
6/12/2018	<0.005	<0.005	0.00103 (J)	<0.005			<0.005		
10/17/2018	<0.005	<0.005	0.00133 (J)	<0.005	<0.005	<0.005	<0.005		
11/19/2018	<0.005	<0.005	0.0012 (J)	<0.005					
3/4/2019									
3/5/2019								<0.005	<0.005
4/10/2019	<0.005	<0.005	<0.005	<0.005	0.00121 (J)	0.00176 (J)	<0.005		
5/14/2019	<0.005	<0.005	<0.005	<0.005					
10/8/2019	<0.005	<0.005	0.0048 (J)						
10/10/2019				<0.005					
10/14/2019					<0.005	0.0012 (J)	<0.005	<0.005	<0.005
10/16/2019	<0.005	<0.005	0.00389 (J)	<0.005					
11/26/2019									
2/3/2020	<0.005	<0.005	<0.005	<0.005	<0.005			<0.005	0.00101 (J)
2/4/2020						0.00128 (J)	<0.005		
2/5/2020									

Constituent: Arsenic (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V
4/25/2016					
4/26/2016					
6/20/2016					
6/22/2016					
8/8/2016					
8/9/2016					
8/24/2016					
10/3/2016					
10/4/2016					
10/26/2016					
11/21/2016					
1/17/2017					
1/18/2017					
3/20/2017					
3/21/2017					
3/22/2017					
4/17/2017					
4/18/2017					
5/30/2017					
5/31/2017					
2/13/2018					
5/22/2018					
5/23/2018					
5/24/2018					
6/11/2018					
6/12/2018					
10/17/2018					
11/19/2018					
3/4/2019		<0.005			
3/5/2019	<0.005				
4/10/2019					
5/14/2019					
10/8/2019					
10/10/2019					
10/14/2019	0.0040./**	.0.005			
10/16/2019	0.0019 (J)	<0.005	0.0010475		
11/26/2019			0.00194 (J)		
2/3/2020	0.00400 (1)	.0.005	0.0045777	0.10	
2/4/2020	0.00123 (J)	<0.005	0.00157 (J)	0.16	0.00000 (1)
2/5/2020					0.00232 (J)

Constituent: Barium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		0.0134	0.00803 (J)	0.0114					
4/26/2016	0.00941 (J)								
6/20/2016	0.00951 (J)	0.0165		0.0103					
6/22/2016			0.0101						
8/8/2016	0.00991 (J)	0.0162							
8/9/2016			0.00889 (J)	0.0119					
8/24/2016	0.00949 (J)	0.0139	0.00962 (J)	0.0118	0.0155	0.0135	0.0536		
10/3/2016	0.0105	0.0164		0.0119	0.0156	0.0127	0.0681		
10/4/2016			0.00984 (J)						
10/26/2016	0.00931 (J)	0.0138	0.00878 (J)	0.0104	0.0122	0.0118	0.0562		
11/21/2016	0.00879 (J)	0.0144	0.00833 (J)	0.0106	0.0128	0.012	0.0604		
1/17/2017	0.00929 (J)	0.0135			0.0125	0.0119	0.0402		
1/18/2017			0.00966 (J)	0.0101					
3/20/2017					0.0124		0.0305		
3/21/2017						0.0116			
3/22/2017	0.00938 (J)	0.0132	0.00991 (J)	0.0103					
4/17/2017					0.0149	0.0112			
4/18/2017	0.00964 (J)	0.012	0.00976 (J)	0.0107			0.0276		
5/30/2017	0.00982 (J)				0.0121	0.0117	0.0272		
5/31/2017		0.0126	0.00866 (J)						
2/13/2018	0.00937 (J)	0.0127	0.00821 (J)	0.0111	0.0118	0.0121	0.0249		
5/22/2018	0.0102	0.0131							
5/23/2018				0.0107					
5/24/2018			0.00977 (J)						
6/11/2018					0.0127	0.0139			
6/12/2018	0.0104	0.0138	0.00997 (J)	0.0108			0.0234		
10/17/2018	0.00952 (J)	0.0137	0.0126	0.0119	0.013	0.0125	0.0236		
11/19/2018	0.00915 (J)	0.0115	0.0109	0.0107					
3/4/2019									
3/5/2019								0.0956	0.0136
4/10/2019	0.0105	0.0111	0.0101	0.0107	0.0153	0.0136	0.02		
5/14/2019	0.00913 (J)	0.0109	0.00922 (J)	0.00949 (J)					
10/8/2019	0.0109	0.0151	0.0154						
10/10/2019				0.0116					
10/14/2019					0.0122	0.0147	0.0215	0.0451	0.0123
10/16/2019	0.0106	0.0146	0.0128	0.0125					
11/26/2019									
2/3/2020	0.00995 (J)	0.0122	0.0086 (J)	0.0103	0.0141			0.0215	0.0103
2/4/2020						0.0124	0.0209		
2/5/2020									

Constituent: Barium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V		
4/25/2016							
4/26/2016							
6/20/2016							
6/22/2016							
8/8/2016							
8/9/2016							
8/24/2016							
10/3/2016							
10/4/2016							
10/26/2016							
11/21/2016							
1/17/2017							
1/18/2017							
3/20/2017							
3/21/2017							
3/22/2017							
4/17/2017							
4/18/2017							
5/30/2017							
5/31/2017							
2/13/2018							
5/22/2018							
5/23/2018							
5/24/2018							
6/11/2018							
6/12/2018							
10/17/2018							
11/19/2018							
3/4/2019		0.0239					
3/5/2019	0.0312						
4/10/2019							
5/14/2019							
10/8/2019							
10/10/2019							
10/14/2019							
10/16/2019	0.0163	0.0192					
11/26/2019			0.0184				
2/3/2020							
2/4/2020	0.0148	0.0148	0.0141	0.0296			
2/5/2020					0.096		

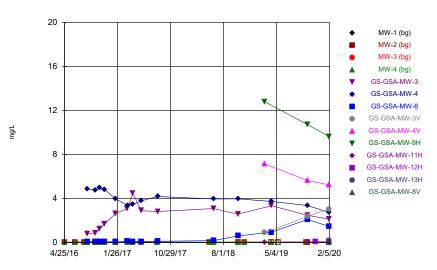
Constituent: Beryllium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

		MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/	/2016		<0.003	0.00122 (J)	<0.003					
4/26/	/2016	<0.003								
6/20/	/2016	<0.003	<0.003		<0.003					
6/22/	/2016			0.00144 (J)						
8/8/2	2016	<0.003	<0.003							
8/9/2	2016			0.00331	<0.003					
8/24/	/2016	<0.003	<0.003	0.00308	<0.003	<0.003	0.00576	<0.003		
10/3/	/2016	<0.003	<0.003		<0.003	<0.003	0.00469	<0.003		
10/4/	/2016			0.00129 (J)						
10/26	6/2016	<0.003	<0.003	0.0071	<0.003	0.000922 (J)	0.00459	<0.003		
11/2	1/2016	<0.003	<0.003	0.00689	<0.003	0.00133 (J)	0.00502	<0.003		
1/17/	/2017	<0.003	<0.003			0.0017 (J)	0.00488	<0.003		
1/18/	/2017			0.0169 (o)	<0.003					
3/20/	/2017					0.00191 (J)		<0.003		
3/21/	/2017						0.00521			
3/22/	/2017	<0.003	<0.003	0.00686	<0.003					
4/17/	/2017					0.00655	0.0058			
4/18/	/2017	<0.003	<0.003	<0.003	<0.003			<0.003		
5/30/	/2017	<0.003				0.00204 (J)	0.00517	<0.003		
5/31/	/2017		<0.003	0.00547						
2/13/	/2018	<0.003	<0.003	<0.003	<0.003	0.00387	0.00544	<0.003		
5/22/	/2018	<0.003	<0.003							
5/23/	/2018				<0.003					
5/24/	/2018			0.00164 (J)						
6/11/	/2018					0.00244 (J)	0.00463			
6/12/	/2018	<0.003	<0.003	0.00306	<0.003			<0.003		
10/17	7/2018	<0.003	<0.003	0.0121	<0.003	0.00345	0.00369	<0.003		
11/19	9/2018	<0.003	<0.003	0.0185 (o)	<0.003					
3/4/2	2019									
3/5/2	2019								<0.003	0.00155 (J)
4/10/	/2019	<0.003	<0.003	<0.003	<0.003	0.00257 (J)	0.00469	<0.003		
5/14/	/2019	<0.003	<0.003	<0.003	<0.003					
10/8/	/2019	<0.003	<0.003	0.0084						
10/10	0/2019				<0.003					
10/14	4/2019					0.00162 (J)	0.00403	<0.003	<0.003	0.00382
10/16	6/2019	<0.003	<0.003	0.0103	<0.003					
11/26	6/2019									
2/3/2	2020	<0.003	<0.003	<0.003	<0.003	0.00141 (J)			<0.003	0.00362
2/4/2	2020						0.00415	<0.003		
2/5/2	2020									

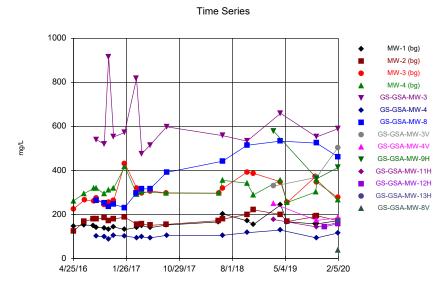
Constituent: Beryllium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V
4/25/2016					
4/26/2016					
6/20/2016					
6/22/2016					
8/8/2016					
8/9/2016					
8/24/2016					
10/3/2016					
10/4/2016					
10/26/2016					
11/21/2016					
1/17/2017					
1/18/2017					
3/20/2017					
3/21/2017					
3/22/2017					
4/17/2017					
4/18/2017					
5/30/2017					
5/31/2017					
2/13/2018					
5/22/2018					
5/23/2018					
5/24/2018					
6/11/2018					
6/12/2018					
10/17/2018					
11/19/2018					
3/4/2019		<0.003			
3/5/2019	<0.003				
4/10/2019					
5/14/2019					
10/8/2019					
10/10/2019					
10/14/2019					
10/16/2019	0.000985 (J)	<0.003			
11/26/2019			0.0084		
2/3/2020					
2/4/2020	0.000929 (J)	<0.003	0.00709	<0.003	
2/5/2020					<0.003



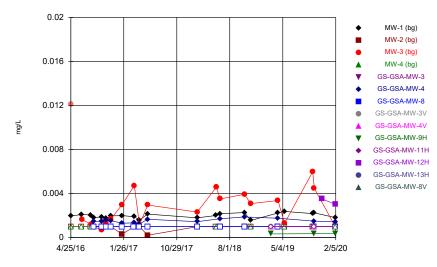
Constituent: Boron Analysis Run 7/22/2020 2:44 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Constituent: Calcium Analysis Run 7/22/2020 2:44 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



Constituent: Cadmium Analysis Run 7/22/2020 2:44 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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4/25/16

1/26/17

Time Series 400 MW-1 (bg) MW-2 (bg) MW-3 (bg) 320 MW-4 (bg) GS-GSA-MW-3 GS-GSA-MW-4 GS-GSA-MW-8 240 GS-GSA-MW-3V mg/L GS-GSA-MW-4V GS-GSA-MW-9H 160 GS-GSA-MW-11H GS-GSA-MW-12H GS-GSA-MW-13H GS-GSA-MW-8V 80 0

Constituent: Chloride Analysis Run 7/22/2020 2:44 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

8/1/18

5/4/19

2/5/20

10/29/17

Constituent: Boron (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		0.0241 (J)	0.028 (J)	0.0414 (J)					
4/26/2016	0.0231 (J)								
6/20/2016	0.0227 (J)	0.0284 (J)		0.0434 (J)					
6/22/2016			0.0433 (J)						
8/8/2016	0.0278 (J)	0.034 (J)							
8/9/2016			0.0429 (J)	0.0453 (J)					
8/24/2016	0.0247 (J)	0.0316 (J)	0.0431 (J)	0.0451 (J)	0.799	4.88	0.0898 (J)		
10/3/2016	0.0307 (J)	0.0367 (J)		0.0511 (J)	0.889	4.75	0.0821 (J)		
10/4/2016			0.04 (J)						
10/26/2016	0.0241 (J)	0.0331 (J)	0.0375 (J)	0.0507 (J)	1.23	4.96	0.0889 (J)		
11/21/2016	0.0202 (J)	0.035 (J)	0.0406 (J)	0.0458 (J)	1.72	4.82	0.0788 (J)		
1/17/2017	0.0201 (J)	0.0259 (J)			2.63	3.97	0.0607 (J)		
1/18/2017			0.0548 (J)	0.0445 (J)					
3/20/2017					3.11		0.114		
3/21/2017						3.39			
3/22/2017	0.0224 (J)	0.0243 (J)	0.0344 (J)	0.0432 (J)					
4/17/2017					4.51	3.46			
4/18/2017	<0.1	0.0206 (J)	<0.1	0.0409 (J)			0.108		
5/30/2017	<0.1				2.9	3.79	0.105		
5/31/2017		0.0234 (J)	0.0454 (J)						
8/23/2017	0.0253 (J)	0.0267 (J)	0.0425 (J)	0.042 (J)					
8/24/2017					2.83	4.19	0.12		
5/22/2018	0.0224 (J)	0.0251 (J)							
5/23/2018				0.0433 (J)					
5/24/2018			0.0339 (J)						
6/11/2018					3.09	3.96			
6/12/2018	0.0214 (J)	0.0275 (J)	0.0371 (J)	0.0478 (J)			0.181		
10/17/2018	0.0216 (J)	0.0321 (J)	0.0596 (J)	0.0468 (J)	2.59	3.98	0.616		
11/19/2018	0.0237 (J)	0.0324 (J)	0.0514 (J)	0.0526 (J)					
3/4/2019									
3/5/2019								0.895	7.15
4/10/2019	0.0304 (J)	<0.1	<0.1	0.0438 (J)	3.35	3.74	0.944		
5/14/2019	<0.1	<0.1	<0.1	<0.1					
10/8/2019	<0.1	0.0371 (J)	0.0537 (J)						
10/10/2019				0.0487 (J)					
10/14/2019					2.48	3.37	2.11	2.38	5.64
10/16/2019	0.0385 (J)	0.0419 (J)	0.05 (J)	0.0505 (J)					
11/26/2019									
2/3/2020	<0.1	<0.1	<0.1	0.0433 (J)	2.13			3.06	5.25
2/4/2020						2.74	1.47		
2/5/2020									

Constituent: Boron (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V	
4/25/2016						
4/26/2016						
6/20/2016						
6/22/2016						
8/8/2016						
8/9/2016						
8/24/2016						
10/3/2016						
10/4/2016						
10/26/2016						
11/21/2016						
1/17/2017						
1/18/2017						
3/20/2017						
3/21/2017						
3/22/2017						
4/17/2017						
4/18/2017						
5/30/2017						
5/31/2017						
8/23/2017						
8/24/2017						
5/22/2018						
5/23/2018						
5/24/2018						
6/11/2018						
6/12/2018						
10/17/2018						
11/19/2018						
3/4/2019		0.0235 (J)				
3/5/2019	12.8					
4/10/2019						
5/14/2019						
10/8/2019						
10/10/2019						
10/14/2019						
10/16/2019	10.7	0.0352 (J)				
11/26/2019			0.0798 (J)			
2/3/2020						
2/4/2020	9.63	<0.1	0.0748 (J)	0.202		
2/5/2020					0.136	

Constituent: Cadmium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		<0.001	0.0121 (o)	<0.001					
4/26/2016	0.00196								
6/20/2016	0.0021	<0.001		<0.001					
6/22/2016			0.00163						
8/8/2016	0.00206	<0.001							
8/9/2016			0.00122	<0.001					
8/24/2016	0.00182	<0.001	<0.001	<0.001	<0.001	0.00148	<0.001		
10/3/2016	0.00188	<0.001		<0.001	<0.001	0.00147	<0.001		
10/4/2016			0.000689 (J)						
10/26/2016	0.00175	<0.001	0.00136	<0.001	<0.001	0.00157	<0.001		
11/21/2016	0.00197	<0.001	0.00171	<0.001	<0.001	0.00154	<0.001		
1/17/2017	0.002	0.000311 (J)			<0.001	0.00131	<0.001		
1/18/2017			0.003	<0.001					
3/20/2017					<0.001		<0.001		
3/21/2017						0.00134			
3/22/2017	0.0019	<0.001	0.00473	<0.001					
4/17/2017					<0.001	0.00122			
4/18/2017	0.00159	<0.001	0.00117	<0.001			<0.001		
5/30/2017	0.00214				<0.001	0.00167	<0.001		
5/31/2017		0.000212 (J)	0.00296						
2/13/2018	0.0018	<0.001	0.00232	<0.001	<0.001	0.00145	<0.001		
5/22/2018	0.00201	<0.001							
5/23/2018				<0.001					
5/24/2018			0.00459						
6/11/2018					<0.001	0.00171			
6/12/2018	0.00217	<0.001	0.00351	<0.001			<0.001		
10/17/2018	0.00228	<0.001	0.00393	<0.001	<0.001	0.00188	<0.001		
11/19/2018	0.00156	<0.001	0.00309	<0.001					
3/4/2019									
3/5/2019								<0.001	<0.001
4/10/2019	0.00224	<0.001	0.00337	<0.001	<0.001	0.00176	<0.001		
5/14/2019	0.00238	<0.001	0.0013	<0.001					
10/8/2019	0.00218	<0.001	0.00598						
10/10/2019				<0.001					
10/14/2019					<0.001	0.0015	<0.001	<0.001	<0.001
10/16/2019	0.00225	<0.001	0.00448	<0.001					
11/26/2019									
2/3/2020	0.00182	<0.001	0.000988 (J)	<0.001	<0.001			<0.001	<0.001
2/4/2020						0.00143	<0.001		
2/5/2020									

Constituent: Cadmium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

4/25/2016 4/26/2016 6/20/2016 6/20/2016 8/8/2016 8/8/2016 8/8/2016 8/8/2016 8/8/2016 10/3/2016 10/3/2016 10/3/2016 11/21/2016 11/21/2016 11/21/2016 11/21/2017 3/20/2017 3/21/2017 3/21/2017 3/21/2017 4/18/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 11/19/2018 3/4/2019 0.000336 (J) 4/10/2019 10/14/2019		GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V	
6/20/2016 6/20/2016 8/8/2016 8/8/2016 8/8/2016 8/24/2016 10/3/2016 10/4/2016 10/4/2016 10/4/2016 11/4/2016 11/4/2017 3/21/2017 3/21/2017 3/21/2017 3/21/2017 4/17/2017 4/17/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/22/2018 5/22/2018 5/22/2018 5/24/2018 6/11/2018 11/19/2018 3/4/2019 0.000336 (J) 4/10/2019 10/14/2019 10/14/2019 10/14/2019 10/14/2019 10/14/2019 10/14/2019 10/14/2019 10/14/2020 0.000349 (J) 4/0.0011	4/25/2016						
6/22/2016 8/8/2016 8/8/2016 8/8/2016 8/8/2016 10/3/2016 10/4/2016 10/3/2016 10/4/2016 10/2016 11/21/2016 11/21/2016 11/21/2016 11/21/2017 1/8/2017 3/202017 3/21/2017 4/7/2017 4/18/2017 5/31/2017 5/31/2017 5/31/2017 5/31/2017 5/31/2018 5/22/2018 5/22/2018 6/11/2018 1/11/2018 1/11/2018 1/11/2018 1/11/2018 1/11/2019 1	4/26/2016						
8/8/2016 8/9/2016 8/9/2016 8/12/2016 10/3/2016 10/3/2016 10/3/2016 10/3/2016 11/12/2016 11/12/2017 1/18/2017 3/20/2017 3/20/2017 3/21/2017 4/18/2017 4/18/2017 5/30/2017 5/31/2017 5/31/2017 5/31/2017 5/31/2018 5/22/2018 5/22/2018 5/22/2018 5/22/2018 6/11/2018 10/17/2018 11/19/2018 11/19/2019 3/5/2019 0.000336 (J) 4/10/2019 10/18/2019	6/20/2016						
8/9/2016 8/24/2016 10/3/2016 10/3/2016 10/26/2016 11/21/2016 11/21/2016 11/21/2017 3/21/2017 3/21/2017 3/21/2017 3/21/2017 4/18/2017 5/30/2017 5/31/2017 5/31/2017 5/31/2017 5/31/2017 5/31/2018 5/22/2018 5/2	6/22/2016						
8/24/2016 10/3/2016 10/3/2016 10/26/2016 11/21/2016 11/21/2016 11/21/2017 11/8/2017 3/20/2017 3/20/2017 3/21/2017 4/17/2017 4/17/2017 4/18/2017 5/31/2017 5/31/2017 2/13/2018 5/23/2018 5/23/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2019 10/10/2019	8/8/2016						
10/3/2016 10/4/2016 10/26/2016 11/21/2016 11/21/2017 1/18/2017 3/21/2017 3/21/2017 3/21/2017 3/21/2017 4/18/2017 5/30/2017 5/30/2017 5/31/2017 2/13/2018 5/23/2018 5/23/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 11/19/2018 3/4/2019 10/10/2019	8/9/2016						
10/4/2016 10/26/2016 11/21/2017 1/18/2017 3/20/2017 3/21/2017 3/21/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 5/31/2017 5/31/2017 5/31/2018 5/24/2018 6/11/2018 6/11/2018 6/11/2018 11/19/2018 3/4/2019 0.000336 (J) 4/10/2019 10/14/2019 10/16/	8/24/2016						
10/26/2016 11/21/2016 11/17/2017 1/18/2017 3/20/2017 3/21/2017 3/21/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 5/31/2017 5/31/2017 5/31/2018 5/22/2018 5/22/2018 5/22/2018 5/22/2018 5/22/2018 5/22/2018 5/22/2018 5/22/2018 5/24/2018 6/11/2018 10/17/2018 11/19/2018 11/19/2018 11/19/2019 10/16/2019	10/3/2016						
11/21/2016 11/17/2017 11/18/2017 3/20/2017 3/21/2017 4/17/2017 4/18/2017 4/18/2017 5/30/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/23/2019 10/10/20	10/4/2016						
1/17/2017 1/18/2017 3/20/2017 3/21/2017 3/21/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/22/2018 6/11/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 11/19/2018 11/19/2019 10/16/2019 10/00/3049(J) <0.001	10/26/2016						
1/18/2017 3/20/2017 3/21/2017 3/21/2017 4/17/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/22/2018 5/22/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 0.000336 (J) 4/10/2019 10/16/2019	11/21/2016						
3/20/2017 3/21/2017 3/22/2017 4/17/2017 4/18/2017 5/30/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/23/2018 5/24/2018 6/11/2018 6/11/2018 10/17/2018 10/17/2018 11/19/2018 3/4/2019 0.000336 (J) 4/10/2019 10/16/2019 10/1	1/17/2017						
3/20/2017 3/21/2017 3/21/2017 4/11/2017 4/18/2017 5/30/2017 5/30/2017 5/31/2018 5/22/2018 5/22/2018 5/22/2018 6/11/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 3/5/2019 0.000336 (J) 4/10/2019 5/14/2019 10/16/2019	1/18/2017						
3/21/2017 3/22/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 5/31/2017 5/31/2018 5/22/2018 5/22/2018 5/22/2018 6/11/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 0.000336 (J) 4/10/2019 5/14/2019 10/18							
3/22/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/22/2018 5/22/2018 6/11/2018 6/12/2018 10/17/2018 11/19/2018 31/4/2019 3/5/2019 0.000336 (J) 4/10/2019 10/10/2019 10/10/2019 10/10/2019 10/10/2019 10/10/2019 10/16/2019 0.000362 (J) <0.001 11/26/2019 0.000349 (J) <0.0031 <0.0031							
4/17/2017 4/18/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/22/2018 5/22/2018 6/11/2018 6/11/2018 10/17/2018 10/17/2018 11/19/2018 3/4/2019 < <0.001 3/5/2019 0.000336 (J) 4/10/2019 10/18/2019 10/18/2019 10/18/2019 10/18/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 2/3/2020 2/4/2020 0.000349 (J) <0.001 0.00301 <0.001							
4/18/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/23/2018 5/24/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 11/19/2018 3/4/2019 3/5/2019 0.000336 (J) 4/10/2019 5/14/2019 10/16/2019							
5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/23/2018 5/24/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 0.000336 (J) 4/10/2019 10/16/2019							
5/31/2017 2/13/2018 5/22/2018 5/23/2018 5/24/2018 6/11/2018 6/12/2018 10/17/2018 11/19/2018 3/4/2019 3/5/2019 0.000336 (J) 4/10/2019 5/14/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 2/3/2020 2/4/2020 0.000349 (J)							
2/13/2018 5/22/2018 5/23/2018 5/24/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019							
5/22/2018 5/23/2018 5/24/2018 6/11/2018 6/12/2018 10/17/2018 11/19/2018 3/4/2019 3/5/2019 0.000336 (J) 4/10/2019 5/14/2019 10/10/2019 10/10/2019 10/14/2019 10/16/2019							
5/23/2018 5/24/2018 6/11/2018 6/12/2018 10/17/2018 11/19/2018 3/4/2019							
5/24/2018 6/11/2018 6/12/2018 10/17/2018 11/19/2018 3/4/2019							
6/11/2018 6/12/2018 10/17/2018 11/19/2018 3/4/2019 <0.001 3/5/2019 0.000336 (J) 4/10/2019 5/14/2019 10/18/2019 10/10/2019 10/14/2019 10/16/2019 0.000362 (J) <0.001 11/26/2019 0.000349 (J) <0.001 0.00351 2/3/2020 2/4/2020 0.000349 (J) <0.001 0.00301 <0.001							
6/12/2018 10/17/2018 11/19/2018 3/4/2019	6/11/2018						
11/19/2018 3/4/2019							
11/19/2018 3/4/2019							
3/4/2019 < 0.000336 (J) 4/10/2019 5/14/2019 10/18/2019 10/10/2019 10/14/2019 10/16/2019 10/16/2019 0.000362 (J) < 0.001 11/26/2019 2/3/2020 2/4/2020							
3/5/2019 0.000336 (J) 4/10/2019 5/14/2019 10/8/2019 10/10/2019 10/14/2019 10/16/2019 0.000362 (J) <0.001 11/26/2019 0.000362 (J) <0.00351 2/3/2020 2/4/2020 0.000349 (J) <0.001 0.00301 <0.001			<0.001				
4/10/2019 5/14/2019 10/8/2019 10/10/2019 10/14/2019 10/16/2019 0.000362 (J) <0.001 11/26/2019 2/3/2020 2/4/2020 0.000349 (J) <0.001 0.00301 <0.001		0.000336 (J)					
5/14/2019 10/8/2019 10/10/2019 10/14/2019 10/16/2019 0.000362 (J) <0.001 11/26/2019 2/3/2020 2/4/2020 0.000349 (J) <0.001 0.00301 <0.001		.,					
10/8/2019 10/10/2019 10/14/2019 10/16/2019							
10/10/2019 10/14/2019 10/16/2019							
10/14/2019 10/16/2019							
10/16/2019							
11/26/2019 0.00351 2/3/2020 2/4/2020 0.000349 (J) <0.001 0.00301 <0.001		0.000362 (J)	<0.001				
2/3/2020 2/4/2020 0.000349 (J) <0.001 0.00301 <0.001				0.00351			
2/4/2020 0.000349 (J) <0.001 0.00301 <0.001							
		0.000349 (J)	<0.001	0.00301	<0.001		
2/5/2020 <0.001	2/5/2020				2.00.	<0.001	

Constituent: Calcium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		123	224	261					
4/26/2016	147								
6/20/2016	152	168		295					
6/22/2016			266						
8/8/2016	150	180							
8/9/2016			260	318					
8/24/2016	142	180	274	319	539	102	263		
10/3/2016	139	184		293	519.7	98.4	253		
10/4/2016			243						
10/26/2016	133	171	254	311	916	88.7	235		
11/21/2016	144	179	263	320	552	104	246		
1/17/2017	131	188			572	102	231		
1/18/2017			431	417					
3/20/2017					817		298		
3/21/2017						94.7			
3/22/2017	141	155	318	292					
4/17/2017					476	97.9			
4/18/2017	149	156	296	302			317		
5/30/2017	140				515	93.9	316		
5/31/2017		151	306						
8/23/2017	152	155	298	297					
8/24/2017					598	105	391		
5/22/2018	166	172							
5/23/2018				296					
5/24/2018			297						
6/11/2018					558	105			
6/12/2018	203	179	318	355			442		
10/17/2018	171	200	392	342	533	117	514		
11/19/2018	154	221	387	289					
3/4/2019									
3/5/2019								329	249
4/10/2019	243	200	348	356	659	129	533		
5/14/2019	167	168	254	254					
10/8/2019	157	190	371						
10/10/2019				302					
10/14/2019					552	93.5	524	368	173
10/16/2019	157	194	346	356					
11/26/2019									
2/3/2020	172	172	276	265	589			504	184
2/4/2020						116	461		
2/5/2020									

Constituent: Calcium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

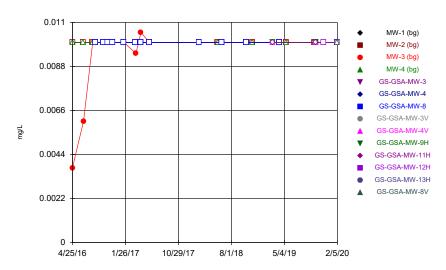
	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	H GS-GSA-MW-8V	
4/25/2016						
4/26/2016						
6/20/2016						
6/22/2016						
8/8/2016						
8/9/2016						
8/24/2016						
10/3/2016						
10/4/2016						
10/26/2016						
11/21/2016						
1/17/2017						
1/18/2017						
3/20/2017						
3/21/2017						
3/22/2017						
4/17/2017						
4/18/2017						
5/30/2017						
5/31/2017						
8/23/2017						
8/24/2017						
5/22/2018						
5/23/2018						
5/24/2018						
6/11/2018						
6/12/2018						
10/17/2018						
11/19/2018						
3/4/2019		177				
3/5/2019	578					
4/10/2019						
5/14/2019						
10/8/2019						
10/10/2019						
10/14/2019						
10/16/2019	363	143				
11/26/2019			144			
2/3/2020						
2/4/2020	413	163	158	171		
2/5/2020					37.3	

Constituent: Chloride (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016	WVV 1 (Dg)	1.9	1.32	1.53	do do/tiiiv o	do do/tiiii +	ao ao a mini	ao ao/(m// o/	do do/timii 4V
4/26/2016	1.94								
6/20/2016	2.09	3.43		1.85					
6/22/2016	2.00	0.10	1.46						
8/8/2016	2.18	3.31							
8/9/2016			1.35	1.95					
8/24/2016	2.22	3.23	1.47	2.07	204	112	4.03		
10/3/2016	2.34	3.21		2.02	220	115	3.87		
10/4/2016			1.59						
10/26/2016	2.34	3.35	1.27	2.07	249	115	4.08		
11/21/2016	2.5	3.34	1.38	2.39	256	117	4.39		
1/17/2017	2.68	3.58			301	99.3	7.22		
1/18/2017			1.34	1.9					
3/20/2017					320		5.7		
3/21/2017						79			
3/22/2017	3.7	3.4	2	1.5 (J)					
4/17/2017				,	340	85			
4/18/2017	2.4	2.6	2.2	1.6 (J)			4.7		
5/30/2017	2.6			- (-)	310	99	15		
5/31/2017		4.4	1.5 (J)						
8/23/2017	2.7	4.4	1.8 (J)	2.3					
8/24/2017			, ,		290	110	93		
5/22/2018	2.3	3.2							
5/23/2018				2					
5/24/2018			1.6 (J)						
6/11/2018					260	81			
6/12/2018	2.3	3.7	1.4 (J)	1.7 (J)			140		
10/17/2018	1.7 (J)	4.6	<2	1.5 (J)	270	85	180		
11/19/2018	1.7 (J)	3	<2	<2					
3/4/2019									
3/5/2019								194	191
4/10/2019	2.36	1.76	2.25	1.88	249	74.3	174		
5/14/2019	2.28	2.98	2.28	1.82					
10/8/2019	2.31	4.26	1.36						
10/10/2019				1.93					
10/14/2019					228	59.1	207	298	122
10/16/2019	2.42	4.04	1.4	1.92					
11/26/2019									
2/3/2020	2.07	2.48	2.12	1.72	267			338	101
2/4/2020						43.2	94.1		
2/5/2020									

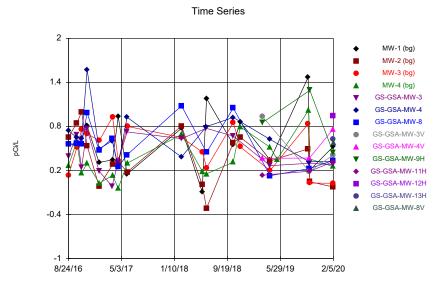
Constituent: Chloride (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	H GS-GSA-MW-8V
4/25/2016					
4/26/2016					
6/20/2016					
6/22/2016					
8/8/2016					
8/9/2016					
8/24/2016					
10/3/2016					
10/4/2016					
10/26/2016					
11/21/2016					
1/17/2017					
1/18/2017					
3/20/2017					
3/21/2017					
3/22/2017					
4/17/2017					
4/18/2017					
5/30/2017					
5/31/2017					
8/23/2017					
8/24/2017					
5/22/2018					
5/23/2018					
5/24/2018					
6/11/2018					
6/12/2018					
10/17/2018					
11/19/2018					
3/4/2019		3.81			
3/5/2019	313				
4/10/2019					
5/14/2019					
10/8/2019					
10/10/2019					
10/14/2019					
10/16/2019	145	4.45			
11/26/2019			2.43		
2/3/2020					
2/4/2020	139	4.27	2.34	12.9	
2/5/2020					9.05



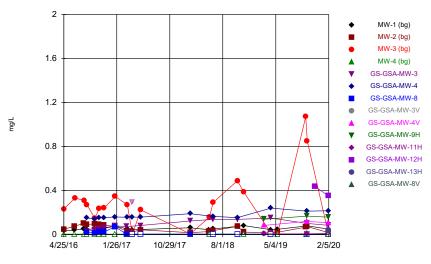
Constituent: Chromium Analysis Run 7/22/2020 2:44 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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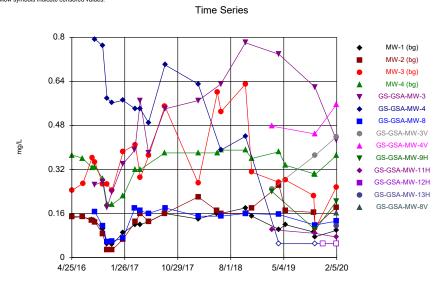
Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 2:44 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



Constituent: Cobalt Analysis Run 7/22/2020 2:44 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Constituent: Fluoride Analysis Run 7/22/2020 2:45 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Constituent: Chromium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		<0.01	0.00373 (J)	<0.01					
4/26/2016	<0.01								
6/20/2016	<0.01	<0.01		<0.01					
6/22/2016			0.00606 (J)						
8/8/2016	<0.01	<0.01							
8/9/2016			<0.01	<0.01					
8/24/2016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
10/3/2016	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
10/4/2016			<0.01						
10/26/2016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
11/21/2016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
1/17/2017	<0.01	<0.01			<0.01	<0.01	<0.01		
1/18/2017			<0.01	<0.01					
3/20/2017					<0.01		<0.01		
3/21/2017						<0.01			
3/22/2017	<0.01	<0.01	0.00945 (J)	<0.01					
4/17/2017					<0.01	<0.01			
4/18/2017	<0.01	<0.01	0.0105	<0.01			<0.01		
5/30/2017	<0.01				<0.01	<0.01	<0.01		
5/31/2017		<0.01	<0.01						
2/13/2018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
5/22/2018	<0.01	<0.01							
5/23/2018				<0.01					
5/24/2018			<0.01						
6/11/2018					<0.01	<0.01			
6/12/2018	<0.01	<0.01	<0.01	<0.01			<0.01		
10/17/2018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
11/19/2018	<0.01	<0.01	<0.01	<0.01					
3/4/2019									
3/5/2019								<0.01	<0.01
4/10/2019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
5/14/2019	<0.01	<0.01	<0.01	<0.01					
10/8/2019	<0.01	<0.01	<0.01						
10/10/2019				<0.01					
10/14/2019					<0.01	<0.01	<0.01	<0.01	<0.01
10/16/2019	<0.01	<0.01	<0.01	<0.01					
11/26/2019									
2/3/2020	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	<0.01
2/4/2020						<0.01	<0.01		
2/5/2020									

Constituent: Chromium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	I GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V	
4/25/2016						
4/26/2016						
6/20/2016						
6/22/2016						
8/8/2016						
8/9/2016						
8/24/2016						
10/3/2016						
10/4/2016						
10/26/2016						
11/21/2016						
1/17/2017						
1/18/2017						
3/20/2017						
3/21/2017						
3/22/2017						
4/17/2017						
4/18/2017						
5/30/2017						
5/31/2017						
2/13/2018						
5/22/2018						
5/23/2018						
5/24/2018						
6/11/2018						
6/12/2018						
10/17/2018						
11/19/2018						
3/4/2019		<0.01				
3/5/2019	<0.01					
4/10/2019						
5/14/2019						
10/8/2019						
10/10/2019						
10/14/2019						
10/16/2019	<0.01	<0.01				
11/26/2019	0.01	3.01	<0.01			
2/3/2020			0.01			
2/4/2020	<0.01	<0.01	<0.01	<0.01		
2/5/2020	-U.U1	-0.01	-U.U1	30.01	<0.01	
21312020					-U.U I	

Constituent: Cobalt (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		0.0487	0.232	<0.005					
4/26/2016	0.0343								
6/20/2016	0.0413	0.0767		<0.005					
6/22/2016			0.332						
8/8/2016	0.0513	0.103							
8/9/2016			0.311	<0.005					
8/24/2016	0.0471	0.093	0.271	<0.005	0.0303	0.151	0.0201		
10/3/2016	0.0525	0.0964		<0.005	0.041	0.143	0.0167		
10/4/2016			0.148						
10/26/2016	0.0527	0.0904	0.236	<0.005	0.0505	0.154	0.0253		
11/21/2016	0.0569	0.0857	0.241	<0.005	0.0617	0.155	0.0233		
1/17/2017	0.0768	0.0745			0.0793	0.16	0.0708		
1/18/2017			0.347	<0.005					
3/20/2017					0.0726		0.00277 (J)		
3/21/2017						0.158			
3/22/2017	0.0535	0.0328	0.271	<0.005					
4/17/2017					0.294 (o)	0.159			
4/18/2017	0.0442	0.0242	0.00324 (J)	<0.005			<0.005		
5/30/2017	0.0465				0.0832	0.159	<0.005		
5/31/2017		0.0441	0.225						
2/13/2018	0.062	0.0179	0.00661 (J)	<0.005	0.124	0.19	0.00492 (J)		
5/22/2018	0.0443	0.028							
5/23/2018				<0.005					
5/24/2018			0.158						
6/11/2018					0.138	0.166			
6/12/2018	0.0512	0.0366	0.291	<0.005			<0.005		
10/17/2018	0.0751	0.0745	0.49	<0.005	0.138	0.154	<0.005		
11/19/2018	0.0825	0.0225	0.386	<0.005					
3/4/2019									
3/5/2019								0.0059	0.0836
4/10/2019	0.0445	0.0152	0.0144	<0.005	0.151	0.241	<0.005		
5/14/2019	0.0485	0.0222	0.00536	<0.005					
10/8/2019	0.0778	0.0674	1.07						
10/10/2019				<0.005					
10/14/2019					0.102	0.213	<0.005	0.00845	0.12
10/16/2019	0.08	0.073	0.848	<0.005		-			
11/26/2019	-	-							
2/3/2020	0.0495	0.0193	0.0114	<0.005	0.0843			0.0135	0.108
2/4/2020		2.2 700				0.217	<0.005		
2/5/2020						U.E.17	5.000		
LIJIZUZU									

Constituent: Cobalt (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	H GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V		
4/25/2016							
4/26/2016							
6/20/2016							
6/22/2016							
8/8/2016							
8/9/2016							
8/24/2016							
10/3/2016							
10/4/2016							
10/26/2016							
11/21/2016							
1/17/2017							
1/18/2017							
3/20/2017							
3/21/2017							
3/22/2017							
4/17/2017							
4/18/2017							
5/30/2017							
5/31/2017							
2/13/2018							
5/22/2018							
5/23/2018							
5/24/2018							
6/11/2018							
6/12/2018							
10/17/2018							
11/19/2018							
3/4/2019		0.0066					
3/5/2019	0.14						
4/10/2019							
5/14/2019							
10/8/2019							
10/10/2019							
10/14/2019							
10/16/2019	0.168	0.00598					
11/26/2019			0.435				
2/3/2020							
2/4/2020	0.159	0.00582	0.351	0.0442			
2/5/2020					<0.005		

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/22/2020 2:55 PM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
8/24/2016	0.566 (U)	0.65	0.131 (U)	0.266 (U)	0.389 (U)	0.741	0.558 (U)		
10/3/2016	0.537 (U)	0.845		0.59 (U)	0.683	0.648	0.565		
10/4/2016			0.514 (U)						
10/26/2016	0.636	0.994	0.755	0.164 (U)	0.242 (U)	0.632	0.555 (U)		
11/21/2016	0.807	0.537 (U)	0.7	0.296 (U)	0.764	1.57	0.987		
1/17/2017	0.308 (U)	-0.0159 (U)			0.191 (U)	0.493	0.476 (U)		
1/18/2017			0.606	0.0267 (U)					
3/20/2017					-0.0158 (U)		0.633 (U)		
3/21/2017						0.604 (U)			
3/22/2017	0.344 (U)	0.279 (U)	0.927	0.132 (U)					
4/17/2017					0.307 (U)	0.252 (U)			
4/18/2017	0.934	0.32 (U)	0.334 (U)	-0.0439 (U)			0.248 (U)		
5/30/2017	0.149 (U)				0.724	0.925	0.412 (U)		
5/31/2017		0.178 (U)	0.8	0.3 (U)					
2/13/2018	0.774	0.804	0.649	0.69	0.633	0.382	1.08		
5/22/2018	-0.091 (U)	0.0077 (U)							
5/23/2018				0.186 (U)					
5/24/2018			0.448 (U)						
6/11/2018					0.773	0.796			
6/12/2018	1.18	-0.315 (U)	0.234 (U)	0.153 (U)			0.446 (U)		
10/17/2018	0.553 (U)	0.574 (U)	0.852	0.313 (U)	0.668	0.922	1.05		
11/19/2018	0.862 (D)	0.654 (D)	0.521 (D)	0.794					
3/4/2019									
3/5/2019								0.932	0.364 (U)
4/10/2019	0.342 (U)	0.329 (U)	0.198 (U)	0.515	0.265 (U)	0.622	0.128 (U)		
5/14/2019				0.352 (U)					
10/8/2019	1.47	0.493 (U)	0.833 (U)						
10/10/2019				1.02 (U)					
10/14/2019					0.297 (U)	0.317 (U)	0.225 (U)	0.184 (U)	0.369 (U)
10/16/2019	0.204 (U)	0.046 (U)	0.0279 (U)	0.356 (U)					
2/3/2020	0.521 (U)	-0.0245 (U)	0.0246 (U)	0.254 (U)	0.28 (U)			0.408 (U)	0.758
2/4/2020						0.324 (U)	0.336 (U)		
2/5/2020									

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/22/2020 2:55 PM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

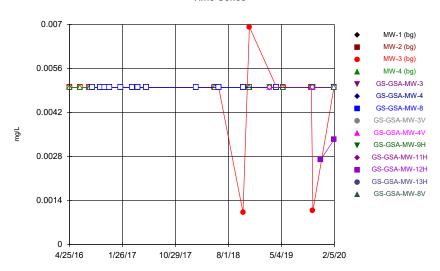
	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V	
8/24/2016						
10/3/2016						
10/4/2016						
10/26/2016						
11/21/2016						
1/17/2017						
1/18/2017						
3/20/2017						
3/21/2017						
3/22/2017						
4/17/2017						
4/18/2017						
5/30/2017						
5/31/2017						
2/13/2018						
5/22/2018						
5/23/2018						
5/24/2018						
6/11/2018						
6/12/2018						
10/17/2018						
11/19/2018						
3/4/2019		0.135 (U)				
3/5/2019	0.852					
4/10/2019						
5/14/2019						
10/8/2019						
10/10/2019						
10/14/2019						
10/16/2019	1.29	0.189 (U)				
2/3/2020						
2/4/2020	0.441 (U)	0.319 (U)	0.939	0.624		
2/5/2020					0.576	

Constituent: Fluoride (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		0.149 (J)	0.243 (J)	0.372					
4/26/2016	0.146 (J)								
6/20/2016	0.148 (J)	0.148 (J)		0.361					
6/22/2016			0.269 (J)						
8/8/2016	0.137 (J)	0.134 (J)							
8/9/2016			0.363	0.326					
8/24/2016	0.133 (J)	0.129 (J)	0.346	0.329	0.264 (J)	0.793	0.165 (J)		
10/3/2016	0.103 (J)	0.086 (J)		0.287 (J)	0.276 (J)	0.769	0.114 (J)		
10/4/2016			0.266 (J)						
10/26/2016	0.05 (J)	0.027 (J)	0.266 (J)	0.194 (J)	0.182 (J)	0.578	0.056 (J)		
11/21/2016	0.047 (J)	0.027 (J)	0.244 (J)	0.192 (J)	0.238 (J)	0.562	0.059 (J)		
1/17/2017	0.09 (J)	0.066 (J)			0.34	0.571	0.07 (J)		
1/18/2017			0.385	0.223 (J)					
3/20/2017					0.39		0.18		
3/21/2017						0.54			
3/22/2017	0.12	0.13	0.41	0.32					
4/17/2017					0.57	0.54			
4/18/2017	0.12	0.16	0.29	0.32			0.17		
5/30/2017	0.13				0.38	0.49	0.16		
5/31/2017		0.13	0.37						
8/23/2017	0.16	0.16	0.55	0.38					
8/24/2017					0.54	0.7	0.18		
2/13/2018	0.14 (D)	0.22 (D)	0.27 (D)	0.38 (D)	0.57 (D)	0.63 (D)	0.15 (D)		
5/22/2018	0.16	0.17							
5/23/2018				0.38					
5/24/2018			0.6						
6/11/2018					0.63	0.39			
6/12/2018	0.16	0.16	0.53	0.39			0.15		
10/17/2018	0.18	0.16	0.63	0.39	0.78	0.44	0.16		
11/19/2018	0.15	0.18	0.31	0.36					
3/4/2019									
3/5/2019								0.249	0.477
4/10/2019	0.102	0.262	0.273	0.384	0.738	<0.1	0.156		
5/14/2019	0.119	0.17	0.281	0.335					
10/8/2019	0.0924 (J)	0.164	0.225						
10/10/2019				0.304					
10/14/2019					0.619	<0.1	0.118	0.37	0.449
10/16/2019	0.0756 (J)	0.114	0.106	0.302					
11/26/2019									
2/3/2020	0.0982 (J)	0.182	0.256	0.37	0.427			0.438	0.555
2/4/2020						<0.1	0.132		
2/5/2020									

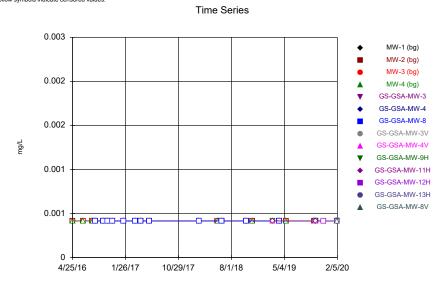
Constituent: Fluoride (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V			
4/25/2016								
4/26/2016								
6/20/2016								
6/22/2016								
8/8/2016								
8/9/2016								
8/24/2016								
10/3/2016								
10/4/2016								
10/26/2016								
11/21/2016								
1/17/2017								
1/18/2017								
3/20/2017								
3/21/2017								
3/22/2017								
4/17/2017								
4/18/2017								
5/30/2017								
5/31/2017								
8/23/2017								
8/24/2017								
2/13/2018								
5/22/2018								
5/23/2018								
5/24/2018								
6/11/2018								
6/12/2018								
10/17/2018								
11/19/2018								
3/4/2019		0.101						
3/5/2019	0.239							
4/10/2019								
5/14/2019								
10/8/2019								
10/10/2019								
10/14/2019								
10/16/2019	0.101	0.0875 (J)						
11/26/2019			<0.1					
2/3/2020								
2/4/2020	0.205	0.0743 (J)	<0.1	0.115				
2/5/2020					0.162			



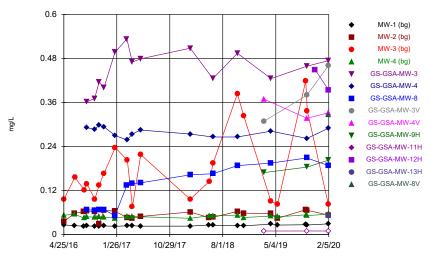
Constituent: Lead Analysis Run 7/22/2020 2:45 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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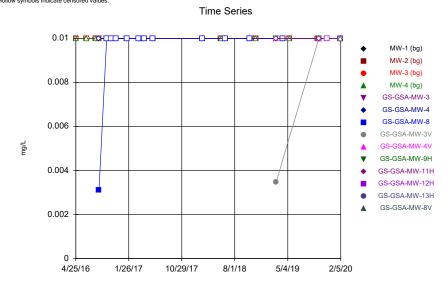
Constituent: Mercury Analysis Run 7/22/2020 2:45 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



Constituent: Lithium Analysis Run 7/22/2020 2:45 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Constituent: Molybdenum Analysis Run 7/22/2020 2:45 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Constituent: Lead (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

4/05/0016	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016	.0.005	<0.005	<0.005	<0.005					
4/26/2016	<0.005	10.005		-0.005					
6/20/2016	<0.005	<0.005	.0.005	<0.005					
6/22/2016	-0.005	-0.005	<0.005						
8/8/2016	<0.005	<0.005	<0.005	<0.00E					
8/9/2016	<0.00E	<0.00E		<0.005	<0.00E	<0.00E	<0.00E		
8/24/2016	<0.005	<0.005 <0.005	<0.005	<0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005		
10/3/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
10/4/2016	<0.00E	<0.00E		<0.00E	<0.00E	<0.00E	<0.00E		
10/26/2016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
11/21/2016	<0.005	<0.005 <0.005	<0.005	<0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005		
1/17/2017	<0.005	<0.005	<0.00E	<0.00E	<0.005	<0.005	<0.005		
1/18/2017			<0.005	<0.005	<0.005		<0.005		
3/20/2017					<0.005	<0.005	<0.005		
3/21/2017 3/22/2017	<0.005	<0.005	<0.005	<0.005		<0.005			
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			
4/17/2017 4/18/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
5/30/2017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
5/31/2017	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		
2/13/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
5/22/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
5/23/2018	~ 0.003	~0.003		<0.005					
5/24/2018			<0.005	10.003					
6/11/2018			10.003		<0.005	<0.005			
6/12/2018	<0.005	<0.005	<0.005	<0.005	10.000	10.003	<0.005		
10/17/2018	<0.005	<0.005	0.00102 (J)	<0.005	<0.005	<0.005	<0.005		
11/19/2018	<0.005	<0.005	0.00692	<0.005	-0.000	-0.000	-0.000		
3/4/2019	10.000	-0.000	0.00002	-0.000					
3/5/2019								<0.005	<0.005
4/10/2019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	0.000
5/14/2019	<0.005	<0.005	<0.005	<0.005	0.000	0.000	0.000		
10/8/2019	<0.005	<0.005	<0.005	0.000					
10/10/2019				<0.005					
10/14/2019					<0.005	<0.005	<0.005	<0.005	<0.005
10/16/2019	<0.005	<0.005	0.00108 (J)	<0.005					
11/26/2019			V-7						
2/3/2020	<0.005	<0.005	<0.005	<0.005	<0.005			<0.005	<0.005
2/4/2020						<0.005	<0.005		
2/5/2020									

Constituent: Lead (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

4/28/2016		GS-GSA-MW-9H	GS-GSA-MW-11H	H GS-GSA-MW-12H	H GS-GSA-MW-13H	GS-GSA-MW-8V		
6022016	4/25/2016							
8222018	4/26/2016							
882016 892016 992017 1022018 1022018 1022010 1022010 1022010 1022010 1022010 1022010 1022010 1022010 1022010 1022010 1022010 1022010 1022010 1022010 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022017 1022018 1	6/20/2016							
89242016 1042618 1042618 11242016 11242016 11242017 32022017 32122017 32122017 32122017 32122017 32122017 32122017 32122018 5232018 5232018 5232018 5232018 5232018 5142018 6112018 61	6/22/2016							
8242016 10262016 10262016 10272016 10272016 11272016 11272016 11322017 11322017 3222017 4172017 4172017 4172017 4172017 4172017 5302017 5302017 5302018 522201	8/8/2016							
10/4/2016 10/4/2016 10/2016 11/21/2016 11/21/2017 3/21/2017 3/21/2017 3/21/2017 3/21/2017 4/18/2017 4/18/2017 5/31/2017 5/31/2018 5/22/2	8/9/2016							
10/4/2016 10/26/2016 11/17/2017 11/18/2017 3/20/2017 3/20/2017 3/20/2017 3/20/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2018 5/20/2018 6/1/2018 6/	8/24/2016							
11/2/2016 11/2/2016 11/2/2017 11/3/2017 3/20/2017 3/20/2017 4/17/2017 4/17/2017 4/18/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2018 5/2/2018 6/1/201	10/3/2016							
11/21/2016 11/17/2017 13/20/2017 32/20/2017 32/20/2017 41/18/2017 41/18/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2018 5/22/2018 5/22/2018 6/12/2018	10/4/2016							
1/17/2017 1/18/2017 3/2017 3/2017 4/17/2017 4/17/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 5/31/2018 5/21/2018 6/12/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 6/11/2018 1/11/30/2018 1/11/30/2018 1/11/30/2018 1/11/30/2018 1/11/30/2019 1/11/3	10/26/2016							
1/18/2017 3/20/2017 3/21/2017 3/21/2017 4/17/2017 4/18/2017 5/30/2017 5/30/2017 5/30/2017 5/30/2018 5/20/2	11/21/2016							
3/2/2017 3/21/2017 4/17/2017 4/18/2017 5/30/2017 5/30/2017 5/31/2017 5/31/2017 5/31/2018 5/22/2018 5/22/2018 6/12/2018 6/11/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 4/0.005 4/10/2019 5/4/40019 10/16/2019 1	1/17/2017							
3/21/2017 3/22/2017 4/17/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/22/2018 5/23/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 11/19/2018 11/19/2019 3/5/2019 4/10/2019 5/14/2019 10/16/	1/18/2017							
3/22/2017 4/17/2017 4/18/2017 5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/22/2018 6/11/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 4-0.005 3/5/2019 4-0.005 3/5/2019 10/18/2019 1	3/20/2017							
4/17/2017 4/18/2017 5/30/2017 5/31/2017 5/31/2017 5/32/2018 5/22/2018 5/22/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 11/19/2018 11/19/2018 11/19/2018 11/19/2018 11/19/2018 11/19/2018 11/19/2018 11/19/2018 11/19/2019 40.005 4/10/2019 5/14/2019 10/16	3/21/2017							
4/18/2017 5/30/2017 5/31/2017 5/31/2018 5/22/2018 5/23/2018 5/23/2018 5/23/2018 6/11/2018 6/11/2018 6/11/2018 11/19/2018 3/4/2019 3/5/2019 4/0.005 4/10/2019 10/14/2019 10/14/2019 10/14/2019 10/14/2019 10/14/2019 10/16/20	3/22/2017							
5/30/2017 5/31/2017 2/13/2018 5/22/2018 5/22/2018 5/22/2018 6/11/2018 6/11/2018 6/11/2018 11/11/2018 11/11/2018 11/11/2019 10/16/2019 2/3/2020 2/4/2020	4/17/2017							
5/31/2018 5/22/2018 5/22/2018 5/23/2018 6/12/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 4/10/2019 5/14/2019 10/16/2019	4/18/2017							
2/13/2018 5/22/2018 5/23/2018 5/24/2018 6/11/2018 6/11/2018 6/11/2018 11/17/2018 11/17/2018 3/4/2019	5/30/2017							
5/22/2018 5/23/2018 5/24/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 3/5/2019 4/0.005 4/10/2019 10/8/2019 10/10/2019 10/	5/31/2017							
5/23/2018 5/24/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 3/5/2019 4/10/2019 5/14/2019 10/6/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 10/16/2019 2/3/2020 2/4/2020 0.005 0.00334 (J) 0.005	2/13/2018							
5/24/2018 6/11/2018 6/11/2018 10/17/2018 11/19/2018 3/4/2019 3/5/2019 4/10/2019 5/14/2019 10/16/2019 10/10/201	5/22/2018							
6/11/2018 6/12/2018 10/17/2018 11/19/2018 3/4/2019	5/23/2018							
6/12/2018 10/17/2018 11/19/2018 3/4/2019	5/24/2018							
10/17/2018 11/19/2018 3/4/2019	6/11/2018							
11/19/2018 3/4/2019	6/12/2018							
3/4/2019 <0.005 3/5/2019 <0.005 4/10/2019 5/14/2019 10/8/2019 10/10/2019 10/10/2019 10/14/2019 10/16/2019 <0.005 <0.005 11/26/2019	10/17/2018							
3/5/2019 <0.005 4/10/2019 5/14/2019 10/8/2019 10/10/2019 10/14/2019 10/16/2019 10/16/2019 2/3/2020 2/4/2020 <0.005 <0.005 <0.0034 (J) <0.005	11/19/2018							
4/10/2019 5/14/2019 10/8/2019 10/10/2019 10/14/2019 10/14/2019 10/16/2019 <0.005 <0.005 11/26/2019 2/3/2020 2/4/2020 <0.005 <0.005 <0.0034 (J) <0.005			<0.005					
5/14/2019 10/8/2019 10/10/2019 10/14/2019 10/14/2019 10/16/2019 <0.005 <0.005 11/26/2019	3/5/2019	<0.005						
10/8/2019 10/10/2019 10/14/2019 10/16/2019 <0.005 <0.005 11/26/2019	4/10/2019							
10/10/2019 10/14/2019 10/16/2019 <0.005 <0.005 11/26/2019 0.00271 (J) 2/3/2020 2/4/2020 <0.005 <0.005 0.00334 (J) <0.005	5/14/2019							
10/14/2019 10/16/2019 <0.005 <0.005 11/26/2019 0.00271 (J) 2/3/2020 2/4/2020 <0.005 <0.005 0.00334 (J) <0.005	10/8/2019							
10/16/2019 <0.005 <0.005 11/26/2019	10/10/2019							
11/26/2019 0.00271 (J) 2/3/2020 2/4/2020 <0.005 <0.005 0.00334 (J) <0.005	10/14/2019							
2/3/2020 2/4/2020 <0.005 <0.005 0.00334 (J) <0.005		<0.005	<0.005					
2/4/2020 <0.005 <0.005 0.00334 (J) <0.005	11/26/2019			0.00271 (J)				
	2/3/2020							
2/5/2020 <0.005	2/4/2020	<0.005	<0.005	0.00334 (J)	<0.005			
	2/5/2020					<0.005		

Constituent: Lithium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

4/25	5/2016	MW-1 (bg)	MW-2 (bg) 0.0353 (J)	MW-3 (bg) 0.0964	MW-4 (bg) 0.0528	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
	5/2016 5/2016	0.0264 (J)	0.0333 (3)	0.0904	0.0328					
	0/2016	0.0204 (J) 0.0246 (J)	0.0583		0.0554					
	2/2016	0.0240 (3)	0.0363	0.156	0.0554					
	2016	0.0229 (J)	0.0627	0.150						
	2016	0.0223 (0)	0.0027	0.122	0.0452 (J)					
	1/2016	0.0236 (J)	0.0651	0.122	0.0432 (J)	0.362	0.291	0.0683		
	3/2016	0.0230 (J) 0.0229 (J)	0.0622	0.130	0.0476 (J)	0.371	0.287	0.0661		
	1/2016	0.0223 (0)	0.0022	0.0966	0.0470 (0)	0.071	0.207	0.0001		
	26/2016	0.0227 (J)	0.0293 (J)	0.134	0.049 (J)	0.416	0.298	0.0681		
	21/2016	0.0236 (J)	0.0667	0.167	0.0477 (J)	0.401	0.294	0.0682		
	7/2017	0.0228 (J)	0.0636	0.107	0.0 177 (0)	0.497	0.27	0.0516		
	3/2017	(2)		0.237	0.045 (J)					
)/2017				(1)	0.533		0.135		
	/2017						0.258			
	2/2017	0.0238 (J)	0.0464 (J)	0.203	0.0493 (J)					
4/17	7/2017					0.47	0.274			
4/18	3/2017	0.0242 (J)	0.0446 (J)	0.0764	0.0494 (J)			0.139		
5/30)/2017	0.0229 (J)				0.479	0.285	0.141		
5/31	/2017		0.0496 (J)	0.218						
2/13	3/2018	0.0233 (J)	0.0615	0.0964	0.0446 (J)	0.508	0.274	0.163		
5/22	2/2018	0.0263 (J)	0.0465 (J)							
5/23	3/2018				0.0513					
5/24	1/2018			0.145						
6/11	/2018					0.425	0.266			
6/12	2/2018	0.0251 (J)	0.0472 (J)	0.194	0.0511			0.166		
10/1	7/2018	0.025 (J)	0.0633	0.384	0.0532	0.494	0.266	0.188		
11/1	9/2018	0.0241	0.0584	0.323	0.0467					
3/4/2	2019									
3/5/2	2019								0.309	0.369
4/10)/2019	0.0285	0.0574	0.0905	0.0504	0.425	0.282	0.195		
5/14	1/2019	0.026 (J)	0.0445	0.0828	0.0485					
10/8	3/2019	0.0268	0.0677	0.419						
10/1	0/2019				0.054					
10/1	4/2019					0.459	0.262	0.209	0.38	0.317
	6/2019	0.0263	0.0661	0.337	0.052					
	26/2019									
2/3/2	2020	0.0292	0.0534	0.0825	0.0556	0.474			0.46	0.332
	2020						0.29	0.188		
2/5/2	2020									

Constituent: Lithium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	I GS-GSA-MW-13H	GS-GSA-MW-8V		
4/25/2016							
4/26/2016							
6/20/2016							
6/22/2016							
8/8/2016							
8/9/2016							
8/24/2016							
10/3/2016							
10/4/2016							
10/26/2016							
11/21/2016							
1/17/2017							
1/18/2017							
3/20/2017							
3/21/2017							
3/22/2017							
4/17/2017							
4/18/2017							
5/30/2017							
5/31/2017							
2/13/2018							
5/22/2018							
5/23/2018							
5/24/2018							
6/11/2018							
6/12/2018							
10/17/2018							
11/19/2018							
3/4/2019		<0.02					
3/5/2019	0.169						
4/10/2019							
5/14/2019							
10/8/2019							
10/10/2019							
10/14/2019							
10/16/2019	0.184	<0.02					
11/26/2019			0.449				
2/3/2020							
2/4/2020	0.203	<0.02	0.394	0.0506			
2/5/2020					0.327		

Constituent: Mercury (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

4/25/2016	MW-1 (bg)	MW-2 (bg) <0.0005	MW-3 (bg) <0.0005	MW-4 (bg) <0.0005	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/26/2016	<0.0005	~0.0003	~0.0003	~0.0003					
6/20/2016	<0.0005	<0.0005		<0.0005					
6/22/2016	<0.0005	<0.0005	<0.0005	<0.0005					
8/8/2016	<0.0005	<0.0005	~0.0003						
8/9/2016	10.0000	10.0000	<0.0005	<0.0005					
8/24/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
10/3/2016	<0.0005	<0.0005	10.0000	<0.0005	<0.0005	<0.0005	<0.0005		
10/4/2016	-0.0000	-0.0000	<0.0005	-0.0000	-0.0000	-0.0000	-0.0000		
10/26/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
11/21/2016	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
1/17/2017	<0.0005	<0.0005	0.0000	0.000	<0.0005	<0.0005	<0.0005		
1/18/2017			<0.0005	<0.0005					
3/20/2017					<0.0005		<0.0005		
3/21/2017						<0.0005			
3/22/2017	<0.0005	<0.0005	<0.0005	<0.0005					
4/17/2017					<0.0005	<0.0005			
4/18/2017	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005		
5/30/2017	<0.0005				<0.0005	<0.0005	<0.0005		
5/31/2017		<0.0005	<0.0005						
2/13/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
5/22/2018	<0.0005	<0.0005							
5/23/2018				<0.0005					
5/24/2018			<0.0005						
6/11/2018					<0.0005	<0.0005			
6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005		
10/17/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
11/19/2018	<0.0005	<0.0005	<0.0005	<0.0005					
3/4/2019									
3/5/2019								<0.0005	<0.0005
4/10/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
5/14/2019	<0.0005	<0.0005	<0.0005	<0.0005					
10/8/2019	<0.0005	<0.0005	<0.0005						
10/10/2019				<0.0005					
10/14/2019					<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10/16/2019	<0.0005	<0.0005	<0.0005	<0.0005					
11/26/2019									
2/3/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005
2/4/2020						<0.0005	<0.0005		
2/5/2020									

Constituent: Mercury (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

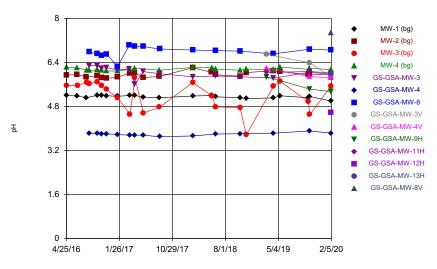
	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V		
4/25/2016							
4/26/2016							
6/20/2016							
6/22/2016							
8/8/2016							
8/9/2016							
8/24/2016							
10/3/2016							
10/4/2016							
10/26/2016							
11/21/2016							
1/17/2017							
1/18/2017							
3/20/2017							
3/21/2017							
3/22/2017							
4/17/2017							
4/18/2017							
5/30/2017							
5/31/2017							
2/13/2018							
5/22/2018							
5/23/2018							
5/24/2018							
6/11/2018							
6/12/2018							
10/17/2018							
11/19/2018							
3/4/2019		<0.0005					
3/5/2019	<0.0005						
4/10/2019							
5/14/2019							
10/8/2019							
10/10/2019							
10/14/2019							
10/16/2019	<0.0005	<0.0005					
11/26/2019			<0.0005				
2/3/2020							
2/4/2020	<0.0005	<0.0005	<0.0005	<0.0005			
2/5/2020					<0.0005		

Constituent: Molybdenum (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		<0.01	<0.01	<0.01					
4/26/2016	<0.01								
6/20/2016	<0.01	<0.01		<0.01					
6/22/2016			<0.01						
8/8/2016	<0.01	<0.01							
8/9/2016			<0.01	<0.01					
8/24/2016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0031 (J)		
10/3/2016	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01		
10/4/2016			<0.01						
10/26/2016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
11/21/2016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
1/17/2017	<0.01	<0.01			<0.01	<0.01	<0.01		
1/18/2017			<0.01	<0.01					
3/20/2017					<0.01		<0.01		
3/21/2017						<0.01			
3/22/2017	<0.01	<0.01	<0.01	<0.01					
4/17/2017					<0.01	<0.01			
4/18/2017	<0.01	<0.01	<0.01	<0.01			<0.01		
5/30/2017	<0.01				<0.01	<0.01	<0.01		
5/31/2017		<0.01	<0.01						
2/13/2018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
5/22/2018	<0.01	<0.01							
5/23/2018				<0.01					
5/24/2018			<0.01						
6/11/2018					<0.01	<0.01			
6/12/2018	<0.01	<0.01	<0.01	<0.01			<0.01		
10/17/2018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
11/19/2018	<0.01	<0.01	<0.01	<0.01					
3/4/2019									
3/5/2019								0.00347 (J)	<0.01
4/10/2019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
5/14/2019	<0.01	<0.01	<0.01	<0.01					
10/8/2019	<0.01	<0.01	<0.01						
10/10/2019				<0.01					
10/14/2019					<0.01	<0.01	<0.01	<0.01	<0.01
10/16/2019	<0.01	<0.01	<0.01	<0.01					
11/26/2019									
2/3/2020	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	<0.01
2/4/2020						<0.01	<0.01		
2/5/2020									

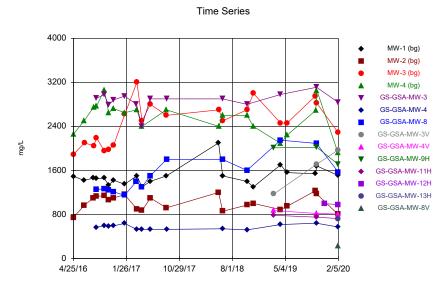
Constituent: Molybdenum (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V	
4/25/2016						
4/26/2016						
6/20/2016						
6/22/2016						
8/8/2016						
8/9/2016						
8/24/2016						
10/3/2016						
10/4/2016						
10/26/2016						
11/21/2016						
1/17/2017						
1/18/2017						
3/20/2017						
3/21/2017						
3/22/2017						
4/17/2017						
4/18/2017						
5/30/2017						
5/31/2017						
2/13/2018						
5/22/2018						
5/23/2018						
5/24/2018						
6/11/2018						
6/12/2018						
10/17/2018						
11/19/2018						
3/4/2019		<0.01				
3/5/2019	<0.01					
4/10/2019						
5/14/2019						
10/8/2019						
10/10/2019						
10/14/2019						
10/16/2019	<0.01	<0.01				
11/26/2019			<0.01			
2/3/2020						
2/4/2020	<0.01	<0.01	<0.01	<0.01		
2/5/2020					<0.01	



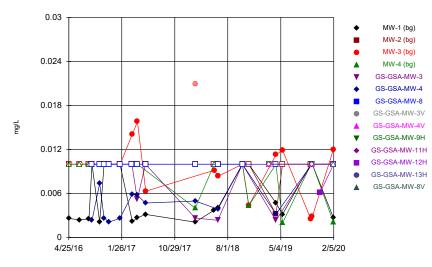
Constituent: pH Analysis Run 7/22/2020 2:45 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG



Constituent: Sulfate Analysis Run 7/22/2020 2:45 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

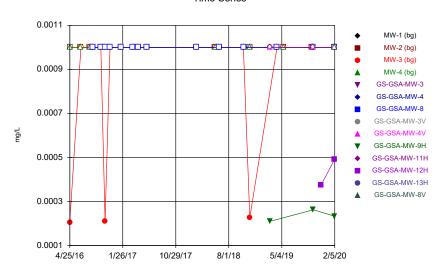
Time Series



Constituent: Selenium Analysis Run 7/22/2020 2:45 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 7/22/2020 2:45 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Constituent: pH (pH) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016	WWV-1 (bg)	5.94	5.56	6.22	do-doA-WV-5	40-40A-WW-4	GO-GOA-IVIVV-0	GO-GOA-WVV-5V	GO-GOA-WWV-4V
4/26/2016	5.2	0.0 .	0.00	0.22					
6/20/2016	5.18	5.96		6.21					
6/22/2016	0.10	0.00	5.57	0.2.					
8/8/2016	5.12	5.88	0.07						
8/9/2016	0.12	0.00	5.67	6.11					
8/24/2016			5.63	6.11	6.28	3.83 (E)	6.78		
10/3/2016	5.21 (D)	5.91 (D)	0.00	6.13 (D)	6.28	3.82 (E)	6.71		
10/4/2016	J.= : (=)		5.69 (D)	(= /		0.02 (2)			
10/26/2016	5.2	5.84	5.56	6.12	6.19	3.81 (E)	6.65		
11/21/2016	5.19 (D)	5.82 (D)	5.42 (D)	6.09 (D)	6.2	3.81	6.7		
1/17/2017	5.17 (D)	5.87 (D)	0.42 (D)	0.00 (D)	6.13	3.78	6.25		
1/18/2017	3 (5)	0.07 (2)	5.11 (D)	6.09 (D)	5.15	0.70	0.20		
3/20/2017			S(2)	0.00 (2)	6.17		7.04		
3/21/2017					0.17	3.76	7.04		
3/22/2017	5.2 (D)	6.01 (D)	4.52 (D)	6.15 (D)		0.70			
4/17/2017	0.2 (2)	0.0 (2)	(5)	0.10 (2)	5.6	3.76			
4/18/2017	5.2	6.02	5.84	6.19	0.0	0.70	6.99		
5/30/2017	5.14 (D)	0.02	0.04	0.10	6.07	3.76	6.98		
5/31/2017	3(5)	5.85 (D)	4.56 (D)		0.07	0.70	0.00		
8/23/2017	5.12 (D)	5.89 (D)	4.77 (D)	6.12					
8/24/2017	3.12 (3)	0.00 (2)	, (5)	02	5.99	3.7	6.89		
2/13/2018	5.18	6.21	5.67	6.22	5.88	3.73	6.85		
5/22/2018	5.2	6.04	0.07	0.22	0.00	0.70	0.00		
5/23/2018	0.2	0.0 .		6.21					
5/24/2018			5.19						
6/11/2018					5.91	3.8			
6/12/2018	5.15	5.95	4.79	6.16			6.83		
10/17/2018	5.12	5.9	4.75	6.12	5.88	3.81	6.81		
11/19/2018	5.09 (D)	6.03 (D)	3.77 (D)	6.16 (D)					
3/4/2019	,	,		,					
3/5/2019								6.7	6.19
4/10/2019	5.11	6.1	5.54	6.14	5.83	3.83	6.71		
5/14/2019	5.19	6.07	5.71	6.23					
10/8/2019	5.12	5.96	4.98						
10/10/2019				6.15					
10/14/2019					6.04	3.91	6.88	6.39	5.89
10/16/2019	5.16	5.98	4.51	6.19		-			
2/3/2020	5	5.95	5.54	6.14	5.98			5.88	5.84
2/4/2020	-			-		3.83	6.85		
2/5/2020									

Constituent: pH (pH) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V		
4/25/2016							
4/26/2016							
6/20/2016							
6/22/2016							
8/8/2016							
8/9/2016							
8/24/2016							
10/3/2016							
10/4/2016							
10/26/2016							
11/21/2016							
1/17/2017							
1/18/2017							
3/20/2017							
3/21/2017							
3/22/2017							
4/17/2017							
4/18/2017							
5/30/2017							
5/31/2017							
8/23/2017							
8/24/2017							
2/13/2018							
5/22/2018							
5/23/2018							
5/24/2018							
6/11/2018							
6/12/2018							
10/17/2018							
11/19/2018							
3/4/2019		6.04					
3/5/2019	5.88						
4/10/2019							
5/14/2019							
10/8/2019							
10/10/2019							
10/14/2019							
10/16/2019	5.43	6.07					
2/3/2020							
2/4/2020	5.34	6.02	4.57	6			
2/5/2020					7.48		

Constituent: Selenium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		<0.01	<0.01	<0.01					
4/26/2016	0.00261 (J)								
6/20/2016	0.00242 (J)	<0.01		<0.01					
6/22/2016			<0.01						
8/8/2016	0.00253 (J)	<0.01							
8/9/2016			<0.01	<0.01					
8/24/2016	<0.01	<0.01	<0.01	<0.01	<0.01	0.00234 (J)	<0.01		
10/3/2016	0.00211 (J)	<0.01		<0.01	<0.01	0.00739 (J)	<0.01		
10/4/2016			<0.01						
10/26/2016	<0.01	<0.01	<0.01	<0.01	<0.01	0.00266 (J)	<0.01		
11/21/2016	<0.01	<0.01	<0.01	<0.01	<0.01	0.00212 (J)	<0.01		
1/17/2017	<0.01	<0.01			<0.01	0.00263 (J)	<0.01		
1/18/2017			<0.01	<0.01					
3/20/2017					<0.01		<0.01		
3/21/2017						0.00588 (J)			
3/22/2017	0.0022 (J)	<0.01	0.0141	<0.01					
4/17/2017					0.00521 (J)	0.00579 (J)			
4/18/2017	0.0027 (J)	<0.01	0.0158	<0.01			<0.01		
5/30/2017	0.00316 (J)				<0.01	0.00471 (J)	<0.01		
5/31/2017		<0.01	0.00632 (J)						
2/13/2018	0.00211 (J)	<0.01	0.0209 (o)	0.00403 (J)	0.00267 (J)	0.00498 (J)	<0.01		
5/22/2018	0.00372 (J)	<0.01							
5/23/2018				<0.01					
5/24/2018			0.00918 (J)						
6/11/2018					0.00236 (J)	0.00388 (J)			
6/12/2018	0.00409 (J)	<0.01	0.00836 (J)	<0.01			<0.01		
10/17/2018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
11/19/2018	<0.01	<0.01	0.00439 (J)	0.00436 (J)					
3/4/2019									
3/5/2019								<0.01	<0.01
4/10/2019	0.00471 (J)	0.00322 (J)	0.0113	<0.01	0.00234 (J)	0.00322 (J)	<0.01		
5/14/2019	0.00316 (J)	<0.01	0.0119	0.00201 (J)					
10/8/2019	<0.01	<0.01	0.00256 (J)						
10/10/2019				<0.01					
10/14/2019	.0.04		0.00000 (1)	0.04	<0.01	<0.01	<0.01	<0.01	<0.01
10/16/2019	<0.01	<0.01	0.00286 (J)	<0.01					
11/26/2019	0.00070 (1)	-0.01	0.010	0.00010 / 15	-0.01			-0.01	-0.04
2/3/2020	0.00272 (J)	<0.01	0.012	0.00212 (J)	<0.01	-0.01	-0.01	<0.01	<0.01
2/4/2020						<0.01	<0.01		
2/5/2020									

Constituent: Selenium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11F	H GS-GSA-MW-12H	H GS-GSA-MW-13H	GS-GSA-MW-8V	
4/25/2016						
4/26/2016						
6/20/2016						
6/22/2016						
8/8/2016						
8/9/2016						
8/24/2016						
10/3/2016						
10/4/2016						
10/26/2016						
11/21/2016						
1/17/2017						
1/18/2017						
3/20/2017						
3/21/2017						
3/22/2017						
4/17/2017						
4/18/2017						
5/30/2017						
5/31/2017						
2/13/2018						
5/22/2018						
5/23/2018						
5/24/2018						
6/11/2018						
6/12/2018						
10/17/2018						
11/19/2018						
3/4/2019		<0.01				
3/5/2019	<0.01					
4/10/2019						
5/14/2019						
10/8/2019						
10/10/2019						
10/14/2019						
10/16/2019	<0.01	<0.01				
11/26/2019			0.00614 (J)			
2/3/2020						
2/4/2020	<0.01	<0.01	<0.01	<0.01		
2/5/2020					<0.01	

Constituent: Sulfate (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

		MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/2	25/2016		745	1890	2260					
4/2	26/2016	1490								
6/2	20/2016	1420	964		2500					
6/2	22/2016			2100						
8/8	8/2016	1460	1100							
8/9	9/2016			2050	2750					
8/2	24/2016	1450	1130	2190	2770	2910	567	1250		
10	/3/2016	1460	1140		3060	2980	596	1270		
10	/4/2016			1950						
10	/26/2016	1330	1060	1980	2650	2790	585	1240		
11.	/21/2016	1420	1100	2060	2720	2880	593	1210		
1/1	17/2017	1350	1160			2950	637	1150		
1/1	18/2017			2620	2650					
3/2	20/2017					2800		1400		
3/2	21/2017						530			
3/2	22/2017	1500	900	3200	2700					
4/1	17/2017					2400	530			
4/1	18/2017	1300	870	2500	2400			1300		
5/3	30/2017	1400				2900	530	1500		
5/3	31/2017		1100	2800						
8/2	23/2017	1500	920	2600	2700					
8/2	24/2017					2900	530	1800		
5/2	22/2018	2100	1200							
5/2	23/2018				2400					
5/2	24/2018			2700						
6/1	11/2018					2900	540			
6/1	12/2018	1500	860	2500	2600			1800		
10	/17/2018	1400	970	2700	2600	2800	520	1600		
11.	/19/2018	1300	1000	3000	2400					
3/4	4/2019									
3/5	5/2019								1170	871
4/1	10/2019	1700	889	2460	2090	2980	616	2150		
5/1	14/2019	1560	948	2460	2240					
10	/8/2019	1540	1230	2950						
10	/10/2019				2690					
10	/14/2019					3110	641	2090	1710	818
10.	/16/2019	1680	1170	2820	3050					
11.	/26/2019									
2/3	3/2020	1510	803	2290	1920	2840			1970	808
2/4	4/2020						571	1570		
2/5	5/2020									

Constituent: Sulfate (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

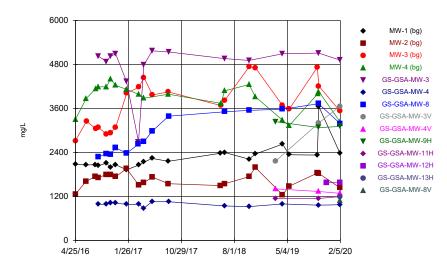
	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V
4/25/2016					
4/26/2016					
6/20/2016					
6/22/2016					
8/8/2016					
8/9/2016					
8/24/2016					
10/3/2016					
10/4/2016					
10/26/2016					
11/21/2016					
1/17/2017					
1/18/2017					
3/20/2017					
3/21/2017					
3/22/2017					
4/17/2017					
4/18/2017					
5/30/2017					
5/31/2017					
8/23/2017					
8/24/2017					
5/22/2018					
5/23/2018					
5/24/2018					
6/11/2018					
6/12/2018					
10/17/2018					
11/19/2018					
3/4/2019		785			
3/5/2019	2010				
4/10/2019					
5/14/2019					
10/8/2019					
10/10/2019					
10/14/2019					
10/16/2019	2020	750			
11/26/2019			997		
2/3/2020					
2/4/2020	1710	725	978	720	
2/5/2020					223

Constituent: Thallium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

4/05/0040	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016	.0.004	<0.001	0.000205 (J)	<0.001					
4/26/2016	<0.001	-0.001		-0.001					
6/20/2016	<0.001	<0.001	.0.004	<0.001					
6/22/2016	-0.001	-0.001	<0.001						
8/8/2016	<0.001	<0.001		.0.004					
8/9/2016	.0.004	.0.004	<0.001	<0.001	0.004	0.004	.0.004		
8/24/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
10/3/2016	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001		
10/4/2016			<0.001						
10/26/2016	<0.001	<0.001	0.000209 (J)	<0.001	<0.001	<0.001	<0.001		
11/21/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
1/17/2017	<0.001	<0.001			<0.001	<0.001	<0.001		
1/18/2017			<0.001	<0.001					
3/20/2017					<0.001		<0.001		
3/21/2017						<0.001			
3/22/2017	<0.001	<0.001	<0.001	<0.001					
4/17/2017					<0.001	<0.001			
4/18/2017	<0.001	<0.001	<0.001	<0.001			<0.001		
5/30/2017	<0.001				<0.001	<0.001	<0.001		
5/31/2017		<0.001	<0.001						
2/13/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
5/22/2018	<0.001	<0.001							
5/23/2018				<0.001					
5/24/2018			<0.001						
6/11/2018					<0.001	<0.001			
6/12/2018	<0.001	<0.001	<0.001	<0.001			<0.001		
10/17/2018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
11/19/2018	<0.001	<0.001	0.000226 (J)	<0.001					
3/4/2019									
3/5/2019								<0.001	<0.001
4/10/2019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
5/14/2019	<0.001	<0.001	<0.001	<0.001					
10/8/2019	<0.001	<0.001	<0.001						
10/10/2019				<0.001					
10/14/2019					<0.001	<0.001	<0.001	<0.001	<0.001
10/16/2019	<0.001	<0.001	<0.001	<0.001					
11/26/2019									
2/3/2020	<0.001	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001
2/4/2020						<0.001	<0.001		
2/5/2020									

Constituent: Thallium (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	H GS-GSA-MW-12H	H GS-GSA-MW-13H	H GS-GSA-MW-8V	,		
4/25/2016								
4/26/2016								
6/20/2016								
6/22/2016								
8/8/2016								
8/9/2016								
8/24/2016								
10/3/2016								
10/4/2016								
10/26/2016								
11/21/2016								
1/17/2017								
1/18/2017								
3/20/2017								
3/21/2017								
3/22/2017								
4/17/2017								
4/18/2017								
5/30/2017								
5/31/2017								
2/13/2018								
5/22/2018								
5/23/2018								
5/24/2018								
6/11/2018								
6/12/2018								
10/17/2018								
11/19/2018								
3/4/2019		<0.001						
3/5/2019	0.00021 (J)							
4/10/2019								
5/14/2019								
10/8/2019								
10/10/2019								
10/14/2019								
10/16/2019	0.000262 (J)	<0.001						
11/26/2019			0.000375 (J)					
2/3/2020								
2/4/2020	0.000233 (J)	<0.001	0.000491 (J)	<0.001				
2/5/2020					<0.001			



Constituent: Total dissolved solids Analysis Run 7/22/2020 2:45 PM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Constituent: Total dissolved solids (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8	GS-GSA-MW-3V	GS-GSA-MW-4V
4/25/2016		1260	2720	3300					
4/26/2016	2080								
6/20/2016	2060	1620		3870					
6/22/2016			3250						
8/8/2016	2070	1740							
8/9/2016			3050	4140					
8/24/2016	2040	1720	3080	4190	5020	992	2280		
10/3/2016	2110	1800		4190	4880	988	2370		
10/4/2016			2900						
10/26/2016	2000	1800	2940	4400	5020	1030	2350		
11/21/2016	2070	1740	3090	4230	5090	1020	2530		
1/17/2017	1930	1960			4330	988	2380		
1/18/2017			4020	4120					
3/20/2017					2690		2630		
3/21/2017						990			
3/22/2017	2060	1510	4180	3980					
4/17/2017					4780	884			
4/18/2017	2140	1580	4440	3880			2700		
5/30/2017	2240				5170	1060	2980		
5/31/2017		1730	3970						
8/23/2017	2160	1550	4050	3990					
8/24/2017					5140	1060	3390		
5/22/2018	2380	1500							
5/23/2018				3740					
5/24/2018			3680						
6/11/2018					4960	944			
6/12/2018	2400	1550	3820	4080			3510		
10/17/2018	2220	1740	4730	4250	4910	928	3550		
11/19/2018	2360	1990	4710	3920					
3/4/2019									
3/5/2019								2170	1410
4/10/2019	2630	1250	3680	3280	5090	1000	3580		
5/14/2019	2340 (D)	1480	3580 (D)	3130 (D)					
10/8/2019	2330	1840	4720						
10/10/2019				4000					
10/14/2019					5110	967	3730	3200	1340
10/16/2019	3650	1830	4210	4060	-		-	-	
11/26/2019									
2/3/2020	2380	1440	3530	3240	4920			3660	1290
2/4/2020		-		-	-	978	3190		-
2/5/2020						- : -			

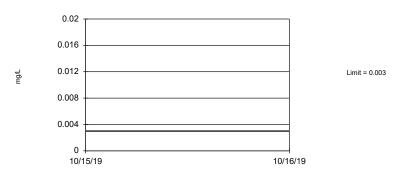
Constituent: Total dissolved solids (mg/L) Analysis Run 7/22/2020 2:55 PM View: Time Series Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-8V			
4/25/2016								
4/26/2016								
6/20/2016								
6/22/2016								
8/8/2016								
8/9/2016								
8/24/2016								
10/3/2016								
10/4/2016								
10/26/2016								
11/21/2016								
1/17/2017								
1/18/2017								
3/20/2017								
3/21/2017								
3/22/2017								
4/17/2017								
4/18/2017								
5/30/2017								
5/31/2017								
8/23/2017								
8/24/2017								
5/22/2018								
5/23/2018								
5/24/2018								
6/11/2018								
6/12/2018								
10/17/2018								
11/19/2018								
3/4/2019		1150						
3/5/2019	3240							
4/10/2019								
5/14/2019								
10/8/2019								
10/10/2019								
10/14/2019								
10/16/2019	3080	1150						
11/26/2019			1580					
2/3/2020								
2/4/2020	3110	1200	1580	1200				
2/5/2020					1100			

Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:59 PM Upper Lim. Lower Lim. Bg N Bg Mean Std. Dev. %NDs ND Adj. Transform Constituent <u>Alpha</u> Method 0.003 92.41 0.01738 NP Inter(NDs) Antimony (mg/L) 79 n/a n/a n/a n/a n/a Arsenic (mg/L) 0.005 79 0.01738 NP Inter(NDs) Barium (mg/L) 0.01531 n/a 79 -4.516 0.1715 0 None In(x) 0.05 Inter 0.0121 Beryllium (mg/L) 77 n/a 81.82 n/a 0.01926 NP Inter(NDs) n/a n/a n/a Cadmium (mg/L) 0.00598 78 48.72 0.0183 NP Inter(normal... 0.0105 94.94 0.01738 NP Inter(NDs) Chromium (mg/L) n/a 79 n/a n/a n/a 1.07 24.05 0.01738 NP Inter(normal... Cobalt (mg/L) n/a 79 n/a n/a n/a n/a Combined Radium 226 + 228 (pCi/L) 1.151 65 0.4707 No 0.05 0.4625 Fluoride (mg/L) 0.5302 83 0.1358 0 None sqrt(x) 0.05 Inter 0.00692 0.01738 NP Inter(NDs) Lead (mg/L) n/a 79 n/a n/a 96.2 n/a n/a Lithium (mg/L) 0.419 79 0.01738 NP Inter(normal... 0.0005 100 0.01738 NP Inter(NDs) Mercury (mg/L) n/a 79 n/a n/a n/a n/a 0.01 100 0.01738 NP Inter(NDs) Molybdenum (mg/L) 79 n/a n/a n/a n/a n/a Selenium (mg/L) 0.0158 66.67 0.0183 NP Inter(NDs) n/a Thallium (mg/L) 0.001 79 n/a 96.2 0.01738 NP Inter(NDs)

Tolerance Limit Interwell Non-parametric



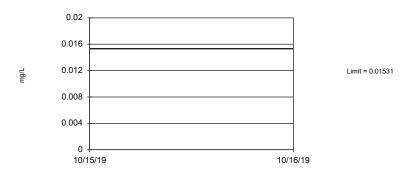
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 92.41% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Antimony Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

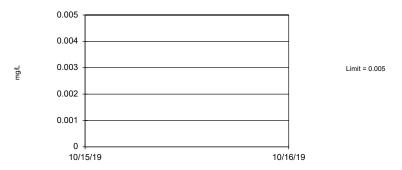
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Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary (based on natural log transformation): Mean=-4.516, Std. Dev.=0.1715, n=79. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9604, critical = 0.957. Report alpha = 0.05.

Tolerance Limit Interwell Non-parametric

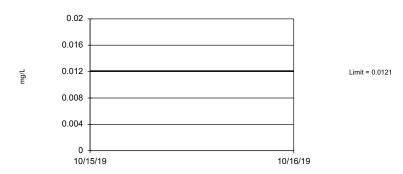


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 91.14% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Arsenic Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

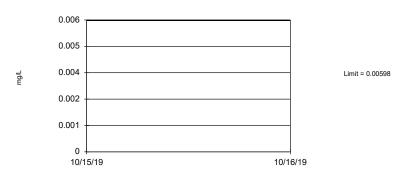
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Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 77 background values. 81.82% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.5. Report alpha = 0.01926.

Tolerance Limit Interwell Non-parametric



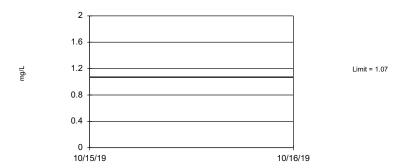
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 78 background values. 48.72% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.05. Report alpha = 0.0183.

Constituent: Cadmium Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

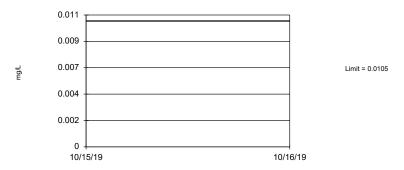
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Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. 24.05% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05. Report alpha = 0.01738.

Tolerance Limit Interwell Non-parametric



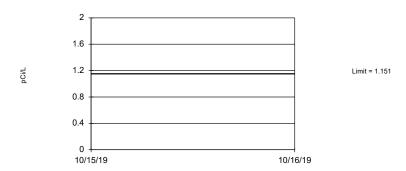
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 94.94% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Chromium Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

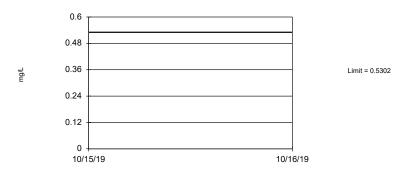
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Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary: Mean=0.4707, Std. Dev.=0.3403, n=65. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.982, critical = 0.948. Report alpha = 0.05.

Tolerance Limit Interwell Parametric



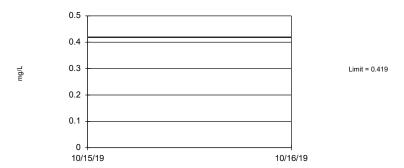
95% coverage. Background Data Summary (based on square root transformation): Mean=0.4625, Std. Dev.=0.1358, n=83. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9794, critical = 0.96. Report alpha = 0.05.

Constituent: Fluoride Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

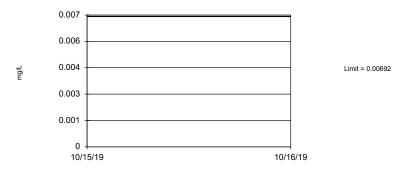
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Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.5. Report alpha = 0.01738.

Tolerance Limit Interwell Non-parametric



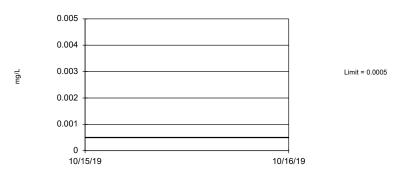
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 96.2% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Lead Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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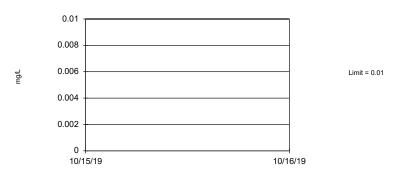
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha=0.01738.

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Tolerance Limit Interwell Non-parametric



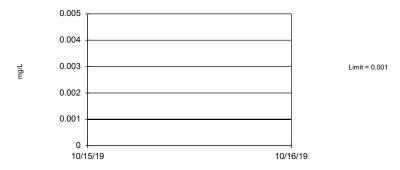
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Molybdenum Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Tolerance Limit Interwell Non-parametric

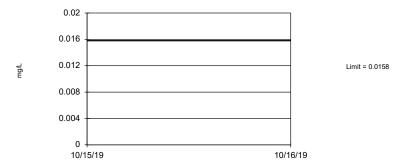


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 96.2% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Thallium Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 78 background values. 66.67% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

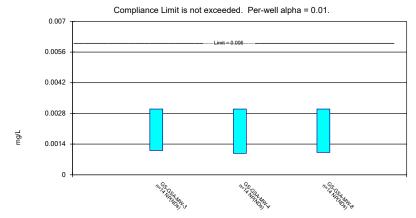
Constituent: Selenium Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Confidence Intervals - All Results (No Significant Results)

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 3:02 PM Constituent <u>Well</u> Upper Lim. Lower Lim. Compliance Sig. N %NDs Transform <u>Alpha</u> Method GS-GSA-MW-3 0.00111 92.86 0.01 NP (NDs) Antimony (ma/L) 0.003 0.006 No 14 No GS-GSA-MW-4 0.000976 NP (NDs) Antimony (mg/L) 0.003 0.006 No 14 92.86 No 0.01 Antimony (mg/L) GS-GSA-MW-8 0.003 0.00102 0.006 No 14 92.86 No 0.01 NP (NDs) GS-GSA-MW-3 0.00405 14 85.71 NP (NDs) 0.005 0.01 No No 0.01 Arsenic (mg/L) Arsenic (mg/L) GS-GSA-MW-4 0.00176 No 14 78.57 No 0.01 Arsenic (mg/L) GS-GSA-MW-8 0.005 0.00114 0.01 No 14 71.43 No 0.01 NP (NDs) GS-GSA-MW-3 0.0153 0.0121 No 14 0 No 0.01 NP (normality) Barium (mg/L) 2 Barium (mg/L) GS-GSA-MW-4 0.01326 0.01182 No 14 No 0.01 Param. Barium (mg/L) GS-GSA-MW-8 0.0562 0.0215 No 14 0 No 0.01 NP (normality) GS-GSA-MW-3 0.001589 0.0121 14 14.29 Beryllium (mg/L) 0.003385 No sqrt(x) 0.01 Param. 0.004399 Beryllium (mg/L) GS-GSA-MW-4 No 14 0 Beryllium (mg/L) GS-GSA-MW-8 0.003 0.003 0.0121 No 14 100 No 0.01 NP (NDs) 0.001 NP (NDs) Cadmium (mg/L) GS-GSA-MW-3 0.001 0.005 No 14 100 No 0.01 Cadmium (mg/L) GS-GSA-MW-4 0.001394 0.005 No 14 No 0.01 Param. Cadmium (mg/L) GS-GSA-MW-8 0.001 0.001 0.005 No 14 100 Nο 0.01 NP (NDs) GS-GSA-MW-3 0.01 14 0.01 NP (NDs) Chromium (mg/L) 0.01 0.1 No 100 No GS-GSA-MW-4 0.01 0.1 No 14 100 0.01 NP (NDs) Chromium (mg/L) No Chromium (mg/L) GS-GSA-MW-8 0.01 No 14 100 No 0.01 NP (NDs) 0.05977 Cobalt (mg/L) GS-GSA-MW-3 0.1181 13 0.01 Param. 1.07 No 0 No Cobalt (mg/L) GS-GSA-MW-4 0.213 0.151 1.07 No 14 No 0.01 NP (normality) Cobalt (mg/L) GS-GSA-MW-8 0.0233 0.00492 1.07 No 14 50 No 0.01 NP (normality) 0.2617 14 0 Combined Radium 226 + 228 (pCi/L) GS-GSA-MW-3 0.6241 5 No No 0.01 Param. Combined Radium 226 + 228 (pCi/L) GS-GSA-MW-4 0.4186 5 No 14 0 0.01 0.8997 No Param. Combined Radium 226 + 228 (pCi/L) GS-GSA-MW-8 0.7638 0.3361 5 No 14 0 No 0.01 Fluoride (ma/L) GS-GSA-MW-3 0.5897 0.3362 No 15 0 No 0.01 Param. Fluoride (mg/L) GS-GSA-MW-4 0.6361 0.3757 No 15 20 0.01 Param. Fluoride (mg/L) GS-GSA-MW-8 0.1632 0.1141 No 15 0 x^2 0.01 Param. NP (NDs) Lead (mg/L) GS-GSA-MW-3 0.005 0.005 0.015 No 14 100 No 0.01 GS-GSA-MW-4 0.005 0.015 14 100 0.01 NP (NDs) Lead (mg/L) No No GS-GSA-MW-8 0.005 0.015 14 100 0.01 NP (NDs) Lead (mg/L) No No Lithium (mg/L) GS-GSA-MW-3 0.4878 0 4142 0.419 No 14 Ω Nο 0.01 Param Lithium (mg/L) GS-GSA-MW-4 0.2875 0.2692 0.419 No 14 0 No 0.01 Param. Lithium (mg/L) GS-GSA-MW-8 0.1719 0.09188 0.419 No 14 0 No 0.01 Param. Mercury (mg/L) GS-GSA-MW-3 0.0005 0.0005 0.002 No 14 100 No 0.01 NP (NDs) 0.0005 0.002 NP (NDs) GS-GSA-MW-4 0.0005 No 14 100 No 0.01 Mercury (mg/L) GS-GSA-MW-8 0.0005 0.0005 0.002 14 0.01 NP (NDs) Mercury (mg/L) No 100 No Molybdenum (mg/L) GS-GSA-MW-3 0.01 0.01 0.1 No 14 100 No 0.01 NP (NDs) GS-GSA-MW-4 0.01 14 0.01 NP (NDs) Molybdenum (mg/L) 0.01 0.1 No 100 No Molybdenum (mg/L) GS-GSA-MW-8 0.0031 No 14 92.86 No 0.01 NP (NDs) Selenium (mg/L) GS-GSA-MW-3 0.01 0.00267 0.05 Nο 14 71 43 Nο 0.01 NP (NDs) GS-GSA-MW-4 0.002926 0.05 0.01 Selenium (mg/L) 0.005203 No 14 21.43 sqrt(x) GS-GSA-MW-8 0.01 0.05 14 0.01 NP (NDs) Selenium (mg/L) No 100 Thallium (mg/L) GS-GSA-MW-3 0.001 0.001 0.002 No 14 100 No 0.01 NP (NDs) GS-GSA-MW-4 0.001 0.002 NP (NDs) Thallium (mg/L) 0.001 No 14 100 No 0.01 GS-GSA-MW-8 0.001 0.002 NP (NDs) Thallium (mg/L) 100 0.01

Non-Parametric Confidence Interval

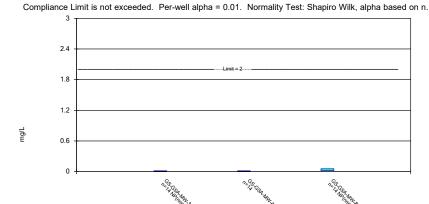


Constituent: Antimony Analysis Run 7/22/2020 3:00 PM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Parametric and Non-Parametric (NP) Confidence Interval

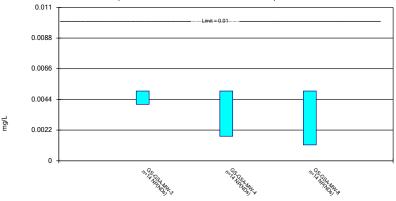


Constituent: Barium Analysis Run 7/22/2020 3:00 PM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

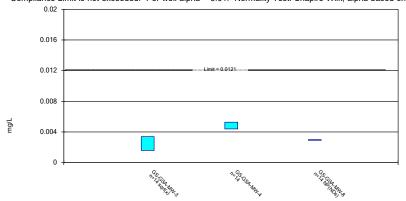


Constituent: Arsenic Analysis Run 7/22/2020 3:00 PM View: Confidence Intervals - Appendix IV
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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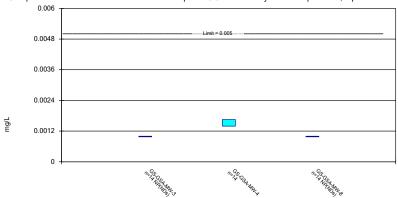
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



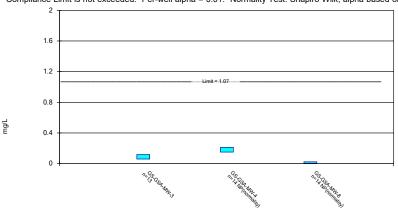
Constituent: Cadmium Analysis Run 7/22/2020 3:00 PM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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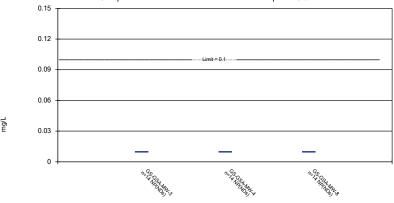
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



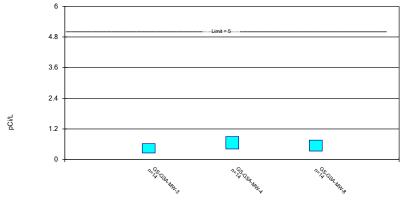
Constituent: Chromium Analysis Run 7/22/2020 3:00 PM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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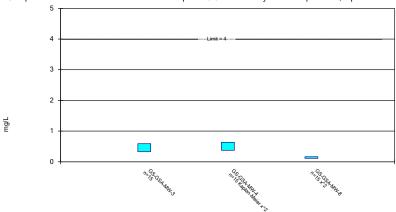
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

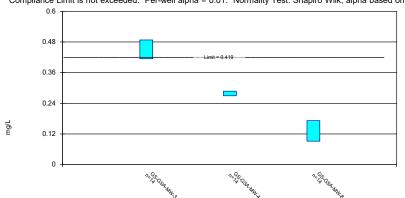


Constituent: Fluoride Analysis Run 7/22/2020 3:01 PM View: Confidence Intervals - Appendix IV
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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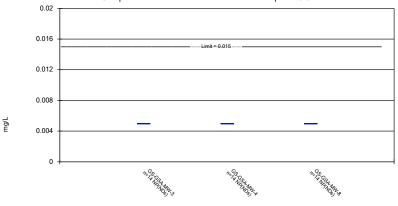
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



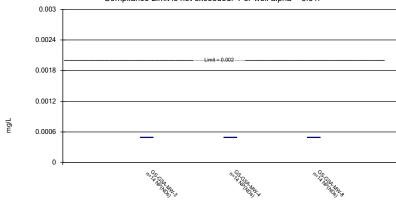
Constituent: Lead Analysis Run 7/22/2020 3:01 PM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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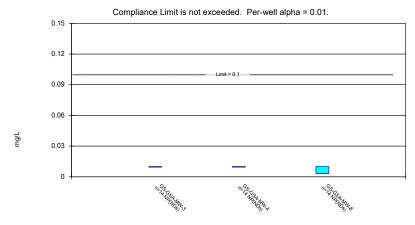
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



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Non-Parametric Confidence Interval

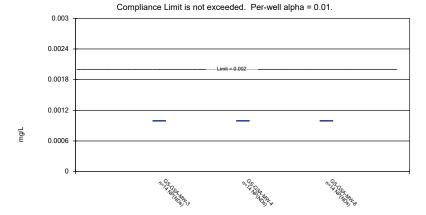


Constituent: Molybdenum Analysis Run 7/22/2020 3:01 PM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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Non-Parametric Confidence Interval

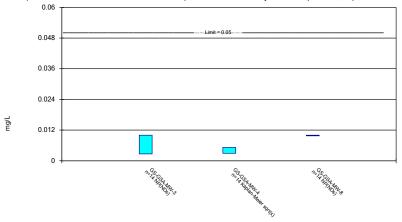


Constituent: Thallium Analysis Run 7/22/2020 3:01 PM View: Confidence Intervals - Appendix IV
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

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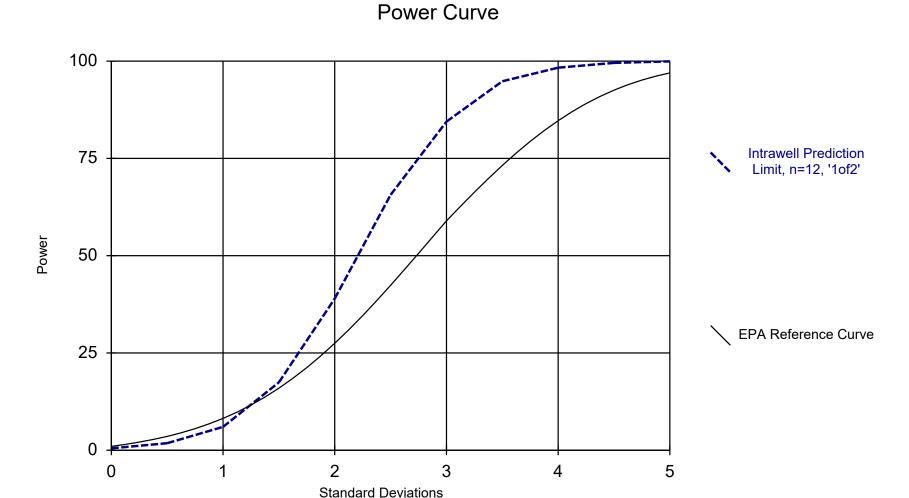
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



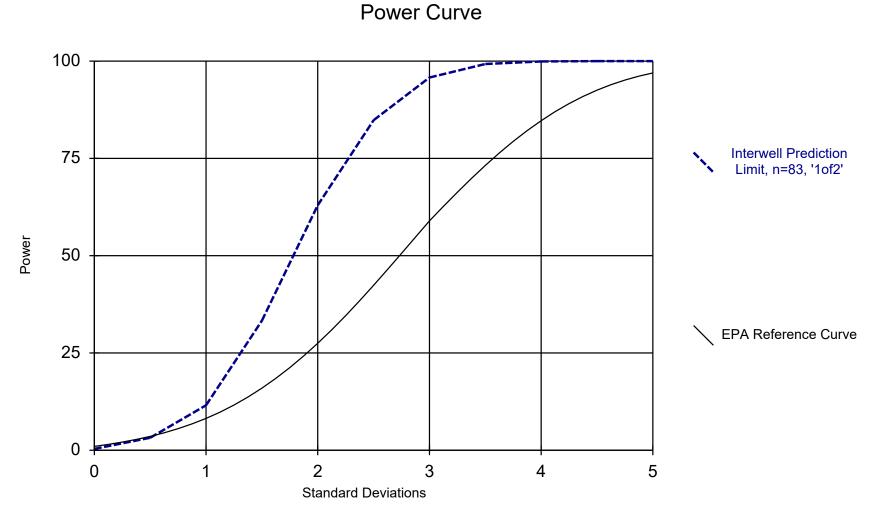
Constituent: Selenium Analysis Run 7/22/2020 3:01 PM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA



Kappa = 2.112, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 6/5/2020 7:41 AM View: Power Curves



Kappa = 1.689, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 6/5/2020 7:42 AM View: Power Curves

2nd Semi-Annual Monitoring Event

GROUNDWATER STATS CONSULTING

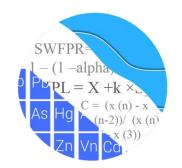
October 20, 2020

Southern Company Services Attn: Mr. Greg Dyer 3535 Colonnade Parkway Birmingham, AL 35243

Re: Plant Gorgas Gypsum Pond

2nd Semi-Annual Analysis – July 2020

Dear Mr. Dyer,



Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the July 2020 2nd semi-annual sample event for Alabama Power Company's Plant Gorgas Gypsum Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

Sampling began at site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- Upgradient wells: MW-1, MW-2, MW-3, and MW-4
- o **Downgradient wells:** GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8
- o **Delineation wells:** GS-GSA-MW-3V, GS-GSA-MW-4V, GS-GSA-MW-9H, GS-GSA-MW-11H, GS-GSA-MW-8V, GS-GSA-MW-12H, GS-GSA-MW-13H, GS-GSA-MW-9V, GS-GSA-MW-12V, and GS-GSA-MW-14H
- o **Piezometers:** GS-GSA-PZ-17, GS-GSA-PZ-18, GS-GSA-PZ-19, GS-GSA-PZ-20, GS-GSA-PZ-21, and GS-GSA-PZ-22

Note that delineation wells and piezometers did not require statistics and, therefore, were plotted only on time series and box plots. Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Kristina Rayner, Founder and Groundwater Statistician for Groundwater Stats Consulting.

The CCR program consists of the following constituents:

Appendix III (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Appendix IV (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs with 100% nondetects follows this letter. A substitution of the most recent reporting limit is used for nondetect data.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for nondetect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 8
- # Background Samples (Interwell): 87
- # Constituents: 7
- # Downgradient wells: 3

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for pH, sulfate, and TDS
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, and fluoride

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of onehalf the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater

quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Update Summary – Conducted in September 2019

Intrawell prediction limits, which compare the most recent compliance sample from a given well to historical data from the same well, are updated by testing for the appropriateness of consolidating new sampling observations with the screened background data. This process is described below and requires a minimum of four new data points. Historical data were evaluated for updating with newer data through May 2019 through the use of time series graphs to identify potential outliers when necessary, as well as the Mann Whitney test for equality of medians. As discussed in the Statistical Analysis Plan (August 2020), intrawell prediction limits are used to evaluate pH, sulfate, and TDS at all wells due to natural spatial variation for these parameters.

Interwell prediction limits are used to compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data for boron, calcium, chloride, and fluoride. As mentioned above, these limits are updated following each sampling event after careful screening for new outliers. Data from upgradient wells are also periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend. No adjustments were required in upgradient wells for constituents evaluated using prediction limits.

Prior to performing prediction limits, proposed background data through May 2019 were reviewed to identify any newly suspected outliers at all wells for pH, sulfate, and TDS and at upgradient wells for boron, calcium, chloride, and fluoride. Both Tukey's test and visual screening are used to identify potential outliers. When identified as outliers, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. Potential outliers that are identified by Tukey's test but are not greatly different from the rest of the data are not flagged. Also, outliers that are not identified as significant by Tukey's test may be identified visually. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of Tukey's test results for Appendix III parameters was included with the September 2019 screening.

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through May 2017 to compliance data through May 2019. When no statistically significant difference between the two groups' data is found at a 99% confidence level, background data may be updated with newer compliance data. Statistically significant differences were found between the two groups for sulfate in well GS-GSA-MW-8; and TDS in wells GS-GSA-MW-8 and MW-1.

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data but will be reconsidered in the future. A summary of these results was included with the Mann Whitney test section in the September 2019 screening and a list of well/constituent pairs using a truncated portion of their records follows this report under the Date Ranges table.

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. Statistically significant trends were noted in upgradient wells and the results were included with the September 2019 screening. These trends required no adjustments at that time, however, because the period of record is short and/or the magnitudes of the trends were low relative to the average concentrations in background.

Evaluation of Appendix III Parameters – July 2020

For Appendix III parameters that are analyzed using interwell prediction limits, background (upgradient) well data were re-assessed for potential outliers during this analysis. No new values were flagged. The background date ranges for intrawell Appendix III parameters remain the same as those screened in the 2019 update. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, and fluoride (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs).

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Intrawell prediction limits combined with a 1-of-2 verification strategy were constructed for pH, sulfate, and TDS (Figure E).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter. Exceedances for both interwell and intrawell prediction limits were identified for the following well/constituent pairs:

Interwell:

• Boron: GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8

Calcium: GS-GSA-MW-3 and GS-GSA-MW-8

Chloride: GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8

Intrawell:

• pH: MW-1 (upgradient)

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure F). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of natural variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing

Boron: GS-GSA-MW-8
 Calcium: GS-GSA-MW-8
 Chloride: GS-GSA-MW-8

Decreasing

Boron: GS-GSA-MW-4Chloride: GS-GSA-MW-4

Evaluation of Appendix IV Parameters – July 2020

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis and no new outliers were flagged. A summary of previously flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management, the Groundwater Protections Standards (GWPS) utilized during the 2019 2nd semi-annual report were used in the confidence interval analysis for this 2020 2nd semi-annual report. The GWPS will be updated during the 2021 2nd semi-annual statistical analysis. The methodology used to create these GWPS is described below.

First, background limits were determined using tolerance limits constructed from pooled upgradient well data. The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. When data followed a normal or transformed-normal distribution, parametric tolerance limits were used to calculate background limits for Appendix IV parameters using pooled upgradient well data through October 2019 with a target of 95% confidence and 95% coverage (Figure G).

Nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% nondetects. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure H) in the confidence interval comparisons described below. Exceptions are noted in Figure H for beryllium and cadmium. For these two parameters, the MCL's were used as the GWPS rather than the higher background UTLs to maintain the more conservative standard. Note that none of the parametric tolerance limits resulted in higher limits than the established MCLs or CCR-Rule Specified Limits. In future UTL calculations,

nonparametric tolerance limits will be used exclusively, as requested by ADEM, to eliminate variation among upgradient well data.

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through July 2020 for each of the Appendix IV parameters. These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of nondetects. As mentioned above, well/constituent pairs with 100% nondetects did not require statistics and were, therefore, deselected prior to construction confidence intervals. A list of deselected well/constituent pairs also follows this report. The decision logic, with respect to the use of a parametric or nonparametric confidence interval, is similar to that used to construct tolerance limits as discussed above. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval was above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter (Figure I). The only exceedance was identified for lithium in well GS-GSA-MW-3.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas Gypsum Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner Groundwater Statistician

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100% Non-Detects

Analysis Run 10/19/2020 4:32 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Arsenic (mg/L) GS-GSA-MW-8

Beryllium (mg/L) GS-GSA-MW-8

Cadmium (mg/L) GS-GSA-MW-3, GS-GSA-MW-8

Chromium (mg/L) GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Lead (mg/L) GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Mercury (mg/L) GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Molybdenum (mg/L) GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Selenium (mg/L) GS-GSA-MW-8

Thallium (mg/L) GS-GSA-MW-3, GS-GSA-MW-8 Sanitas™ v.9.6.27 Groundwater Stats Consulting.

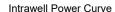
Page 1

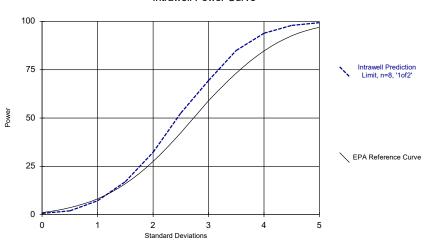
Date Ranges

Date: 10/13/2020 10:20 AM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Total dissolved solids (mg/L) GS-GSA-MW-8 background:1/17/2017-4/10/2019 Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

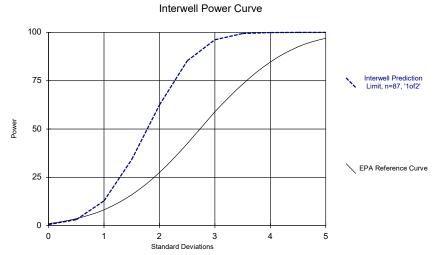




Kappa = 2.458, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 10/13/2020 2:12 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Kappa = 1.685, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 10/13/2020 2:12 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/13/2020, 10:17 AM

Constituent	Well	Upper Lim	Lower Lim	. Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Boron (mg/L)	GS-GSA-MW-3	0.0596	n/a	8/4/2020	1.82	Yes	87	n/a	n/a	16.09	n/a	n/a	0.0002567	NP (normality) 1 of 2
Boron (mg/L)	GS-GSA-MW-4	0.0596	n/a	8/5/2020	2.51	Yes	87	n/a	n/a	16.09	n/a	n/a	0.0002567	NP (normality) 1 of 2
Boron (mg/L)	GS-GSA-MW-8	0.0596	n/a	8/5/2020	2.16	Yes	87	n/a	n/a	16.09	n/a	n/a	0.0002567	NP (normality) 1 of 2
Calcium (mg/L)	GS-GSA-MW-3	431	n/a	8/4/2020	545	Yes	87	n/a	n/a	0	n/a	n/a	0.0002567	NP (normality) 1 of 2
Calcium (mg/L)	GS-GSA-MW-8	431	n/a	8/5/2020	497	Yes	87	n/a	n/a	0	n/a	n/a	0.0002567	NP (normality) 1 of 2
Chloride (mg/L)	GS-GSA-MW-3	3.773	n/a	8/4/2020	222	Yes	87	1.484	0.2724	3.448	None	sqrt(x)	0.002505	Param 1 of 2
Chloride (mg/L)	GS-GSA-MW-4	3.773	n/a	8/5/2020	41	Yes	87	1.484	0.2724	3.448	None	sqrt(x)	0.002505	Param 1 of 2
Chloride (mg/L)	GS-GSA-MW-8	3.773	n/a	8/5/2020	146	Yes	87	1.484	0.2724	3.448	None	sqrt(x)	0.002505	Param 1 of 2

Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/13/2020, 10:17 AM Constituent Well Upper Lim. Lower Lim. Date Observ. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. Transform Alpha Method GS-GSA-MW-3 8/4/2020 1.82 Yes 87 NP (normality) 1 of 2 Boron (mg/L) 0.0596 n/a n/a 16.09 n/a n/a 0.0002567 Boron (mg/L) GS-GSA-MW-4 0.0596 8/5/2020 2.51 Yes 87 16.09 0.0002567 NP (normality) 1 of 2 n/a n/a n/a n/a n/a Boron (mg/L) GS-GSA-MW-8 0.0596 n/a 8/5/2020 2.16 16.09 0.0002567 NP (normality) 1 of 2 GS-GSA-MW-3 8/4/2020 545 n/a 0.0002567 NP (normality) 1 of 2 Calcium (mg/L) 431 Yes 87 n/a 0 n/a n/a n/a Calcium (mg/L) GS-GSA-MW-4 431 n/a 8/5/2020 94.7 No 87 0 0.0002567 NP (normality) 1 of 2 GS-GSA-MW-8 431 8/5/2020 497 Yes 87 0 0.0002567 NP (normality) 1 of 2 Calcium (mg/L) n/a n/a n/a n/a n/a Chloride (mg/L) GS-GSA-MW-3 3.773 n/a 8/4/2020 222 1.484 0.2724 3.448 None sqrt(x) 0.002505 Param 1 of 2 Chloride (mg/L) GS-GSA-MW-4 3.773 8/5/2020 41 Yes 87 1.484 0.2724 0.002505 Param 1 of 2 3.448 None sqrt(x) n/a Chloride (mg/L) 8/5/2020 146 Param 1 of 2 GS-GSA-MW-8 3.773 n/a Yes 87 1.484 0.2724 3.448 sqrt(x) 0.002505 Fluoride (mg/L) GS-GSA-MW-3 0.473 8/4/2020 0.389 No 91 0.4581 0.1366 0.002505 Param 1 of 2 n/a 1.099 None sqrt(x) 0.4581 Fluoride (mg/L) GS-GSA-MW-4 0.473 n/a 8/5/2020 0.05ND No 91 0.1366 1.099 None 0.002505 Param 1 of 2 sqrt(x) Fluoride (mg/L) GS-GSA-MW-8 0.473 8/5/2020 0.4581 0.1366 1.099 sqrt(x) 0.002505 Param 1 of 2

Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/13/2020, 10:25 AM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Date
 Observ.
 Sig.
 Bg N
 Bg Mean
 Std. Dev.
 %NDs
 ND Adj.
 Transform
 Alpha
 Method

 pH (pH)
 MW-1
 5.24
 5.09
 8/3/2020
 5.08
 Yes
 18
 5.165
 0.03869
 0
 None
 No
 0.001253
 Param 1 of 2

Intrawell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/13/2020, 10:25 AM Constituent Well Upper Lim. Lower Lim. Date Observ. Bg N Bg Mean Std. Dev. %NDs ND Adj. Transform Alpha Method GS-GSA-MW-3 0.2034 pH (pH) 6.454 8/4/2020 6.09 No 13 6.032 None No 0.001253 Param 1 of 2 0.04034 pH (pH) GS-GSA-MW-4 3.868 3.701 8/5/2020 3.86 Nο 13 3.785 0 None No 0.001253 Param 1 of 2 pH (pH) GS-GSA-MW-8 6.366 8/5/2020 6.76 6.784 0.2012 0.001253 Param 1 of 2 MW-1 5.24 8/3/2020 Yes 18 5.165 0.03869 0 Param 1 of 2 pH (pH) 5.09 5.08 None Nο 0.001253 pH (pH) MW-2 6.161 5.76 8/3/2020 5.95 No 18 5.961 0.1039 0.001253 Param 1 of 2 MW-3 6.175 8/3/2020 19 27.62 5.502 pH (pH) 4.135 5.06 No 0 None x^2 0.001253 Param 1 of 2 pH (pH) MW-4 6.246 6.063 8/5/2020 6.15 No 18 6.154 0.04755 0 None No 0.001253 Param 1 of 2 GS-GSA-MW-3 12 Param 1 of 2 Sulfate (mg/L) 3089 8/4/2020 2820 1.9e17 4.2e16 0 x^5 0.002505 n/a No None Sulfate (mg/L) GS-GSA-MW-4 648.7 n/a 8/5/2020 519 No 12 564.5 39.86 0 None 0.002505 Param 1 of 2 Param 1 of 2 Sulfate (mg/L) GS-GSA-MW-8 2123 n/a 8/5/2020 1880 No 12 307.9 0 None No 0.002505 Sulfate (mg/L) MW-1 2100 8/3/2020 1370 18 n/a Ω 0.005373 NP (normality) 1 of 2 n/a Nο n/a n/a n/a MW-2 1247 8/3/2020 907 1003 126.2 0.002505 Param 1 of 2 Sulfate (mg/L) n/a No No MW-3 2431 379.6 Param 1 of 2 Sulfate (mg/L) 3164 n/a 8/3/2020 2330 Nο 18 0 None Nο 0.002505 Sulfate (mg/L) MW-4 3023 n/a 8/5/2020 1930 No 17 2558 238.2 0 0.002505 Param 1 of 2 GS-GSA-MW-3 8/4/2020 5110 12 1.4e22 0 0.002505 Param 1 of 2 Total dissolved solids (mg/L) 5416 5.4e21 x^6 n/a No None Total dissolved solids (mg/L) GS-GSA-MW-4 1100 n/a 8/5/2020 938 No 12 990.3 51.88 0 None No 0.002505 Param 1 of 2 Total dissolved solids (mg/L) GS-GSA-MW-8 4264 8/5/2020 3610 8 3090 477.8 0 None 0.002505 Param 1 of 2 n/a No No Total dissolved solids (mg/L) MW-1 2526 n/a 8/3/2020 2200 No 18 2183 178 0 None No 0.002505 Param 1 of 2 Total dissolved solids (mg/L) MW-2 2032 n/a 8/3/2020 1650 No 18 1640 202.8 0 0.002505 Param 1 of 2 None No

3661

628 6

367.3

Ω

None

Nο

0.002505

0.002505

Param 1 of 2

Param 1 of 2

18

17 3923

Nο

Total dissolved solids (mg/L)

Total dissolved solids (mg/L)

MW-3

4874

4639

n/a

n/a

8/3/2020

8/5/2020

3760

Trend Tests Summary Table - Prediction Limit Exceedances - Significant Results

	•							-			
	Plant Gorgas Client: Southern Com	pany Data: Go	rgas GSA	Printed 1	0/13/2	020, 10	:30 AM				
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	GS-GSA-MW-4	-0.494	-65	-53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-8	0.3181	79	53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-8	92.54	71	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	-17.43	-73	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-8	41.11	81	53	Yes	15	0	n/a	n/a	0.01	NP

Trend Tests Summary Table - Prediction Limit Exceedances - All Results

	Plant Gorgas	Client: Southern Company	/ Data: Gorç	gas GSA	Printed 10)/13/20	020, 10:	30 AM				
Constituent	Well	<u>s</u>	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	GS-GSA-MW-3	0	0.3195	23	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-4	-4	0.494	-65	-53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-8	0).3181	79	53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-1 (bg)	0	0.003899	69	92	No	22	27.27	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0	0.003227	72	92	No	22	13.64	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	0.002599	59	92	No	22	18.18	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	0	0.0008345	41	87	No	21	4.762	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	3	3.862	4	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-8	9	2.54	71	53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	6	6.226	91	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	5	5.509	51	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	2	25.31	81	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)		1.57	-4	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	0)	0	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	مي .	17.43	-73	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-8	4	11.11	81	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-1 (bg)	-(0.005518	-4	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	0).1676	22	92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0	0.02724	25	92	No	22	9.091	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-(0.04908	-40	-87	No	21	4.762	n/a	n/a	0.01	NP

Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:59 PM Upper Lim. Lower Lim. Bg N Bg Mean Std. Dev. %NDs ND Adj. Transform Constituent <u>Alpha</u> Method 0.003 92.41 0.01738 NP Inter(NDs) Antimony (mg/L) 79 n/a n/a n/a n/a n/a Arsenic (mg/L) 0.005 79 0.01738 NP Inter(NDs) Barium (mg/L) 0.01531 n/a 79 -4.516 0.1715 0 None In(x) 0.05 Inter 0.0121 Beryllium (mg/L) 77 n/a 81.82 n/a 0.01926 NP Inter(NDs) n/a n/a n/a Cadmium (mg/L) 0.00598 78 48.72 0.0183 NP Inter(normal... 0.0105 94.94 0.01738 NP Inter(NDs) Chromium (mg/L) n/a 79 n/a n/a n/a 1.07 24.05 0.01738 NP Inter(normal... Cobalt (mg/L) n/a 79 n/a n/a n/a n/a Combined Radium 226 + 228 (pCi/L) 1.151 65 0.4707 No 0.05 0.4625 Fluoride (mg/L) 0.5302 83 0.1358 0 None sqrt(x) 0.05 Inter 0.00692 0.01738 NP Inter(NDs) Lead (mg/L) n/a 79 n/a n/a 96.2 n/a n/a Lithium (mg/L) 0.419 79 0.01738 NP Inter(normal... 0.0005 100 0.01738 NP Inter(NDs) Mercury (mg/L) n/a 79 n/a n/a n/a n/a 0.01 100 0.01738 NP Inter(NDs) Molybdenum (mg/L) 79 n/a n/a n/a n/a n/a Selenium (mg/L) 0.0158 66.67 0.0183 NP Inter(NDs) n/a Thallium (mg/L) 0.001 79 n/a 96.2 0.01738 NP Inter(NDs)

Confidence Intervals Summary Table - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/19/2020, 4:37 PM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Compliance Sig. N
 Mean
 Std. Dev.
 %NDs ND Adj.
 Transform Alpha
 Method

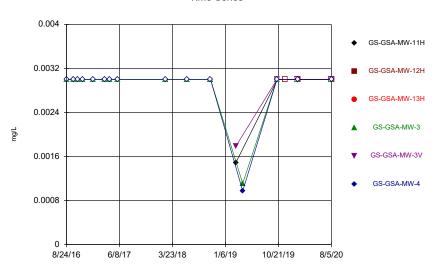
 Lithium (mg/L)
 GS-GSA-MW-3
 0.498
 0.435
 0.419
 Yes 8
 0.4665
 0.02975
 0
 None
 No
 0.0
 Param.

Confidence Intervals Summary Table - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/19/2020, 4:37 PM Constituent <u>Well</u> Upper Lim. Lower Lim. Compliance Sig. N <u>Mean</u> Std. Dev. %NDs ND Adj. Transform Alpha Method Antimony (mg/L) GS-GSA-MW-3 0.003 0.00111 0.006 No 8 0.002764 0.0006682 87.5 None 0.004 NP (NDs) No Antimony (mg/L) GS-GSA-MW-4 0.003 0.000976 0.006 No 8 0.002747 0.0007156 87.5 None No 0.004 NP (NDs) GS-GSA-MW-8 0.003 0.00102 0.002753 0.0007 87.5 0.004 NP (NDs) Antimony (ma/L) 0.006 No 8 None No Arsenic (mg/L) GS-GSA-MW-3 0.005 0.00121 0.01 No 8 0.004526 0.00134 87.5 None No 0.004 NP (NDs) Arsenic (mg/L) GS-GSA-MW-4 0.005 0.00115 0.01 No 8 0.003174 0.001961 50 0.004 NP (normality) None No Barium (mg/L) GS-GSA-MW-3 0.01441 0.01186 2 No 8 0.01314 0.001203 0 None No 0.01 Param. Barium (mg/L) GS-GSA-MW-4 0.0143 0.01197 2 0.01314 0.01 Param. No 8 0.001099 0 None No Barium (mg/L) GS-GSA-MW-8 0.0254 0.02038 2 No 8 0.02289 0.002369 No 0.01 Param. 0.002393 Beryllium (mg/L) GS-GSA-MW-3 0.003328 0.001457 0.004 No 8 0.0008821 0 None Nο 0.01 Param. Beryllium (mg/L) GS-GSA-MW-4 0.005126 0.003787 No 8 0.004456 0.0006316 0 Param. Cadmium (mg/L) GS-GSA-MW-4 0.001451 No 8 0.001621 0.0001602 0 Param. 0.001791 0.005 None Nο 0.01 Cobalt (mg/L) GS-GSA-MW-3 0.1427 0.08399 1.07 No 8 0.1133 0.02768 0.01 Cobalt (mg/L) GS-GSA-MW-4 0.2335 0.1969 0.03451 0 0.1603 1.07 No 8 0.01 Param. None No Cobalt (mg/L) GS-GSA-MW-8 0.005 0.00492 0.00499 0.00002828 87.5 0.004 NP (NDs) Combined Radium 226 + 228 (pCi/L) GS-GSA-MW-3 0.7368 0.2857 5 No 8 0.5113 0.2128 0 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) GS-GSA-MW-4 0.925 5 No 8 0.5846 0.2658 0 No 0.004 NP (normality) Combined Radium 226 + 228 (pCi/L) 0.01 Param. GS-GSA-MW-8 0.8922 -0.001707 5 No 8 0.4453 0.4217 0 None Fluoride (mg/L) GS-GSA-MW-3 0.7312 0.4421 No 8 0.5866 0.1364 0 0.01 Param. None No 0.004 NP (normality) Fluoride (mg/L) GS-GSA-MW-4 0.7 0.1 No 8 0.32 0.2545 50 None No Fluoride (mg/L) GS-GSA-MW-8 0.1683 0.123 No 8 0.1456 0.02135 0 None No 0.01 Param. Lithium (mg/L) GS-GSA-MW-3 0.498 0.435 0.419 Yes 8 0.4665 0.02975 None No 0.01 Param. Lithium (mg/L) GS-GSA-MW-4 0.2854 0.2748 0.01007 0.01 Param. 0.2641 0.419 No 8 0 None No Lithium (mg/L) GS-GSA-MW-8 0.2068 0.1572 0.419 No 8 0.182 0.02343 No 0.01 Param. Selenium (mg/L) GS-GSA-MW-3 0.01 0.00234 0.05 0.007171 0.003905 0.004 NP (NDs) No 8 62.5 None No Selenium (mg/L) GS-GSA-MW-4 0.01 0.00298 0.05 0.006221 0.003199 None 0.004 NP (normality) Thallium (mg/L) GS-GSA-MW-4 0.001 0.000205 0.002 No 8 0.0009006 0.0002811 87.5 Nο 0.004 NP (NDs) None

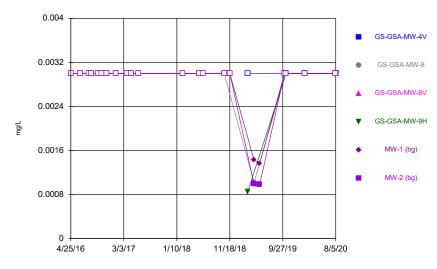
FIGURE A.





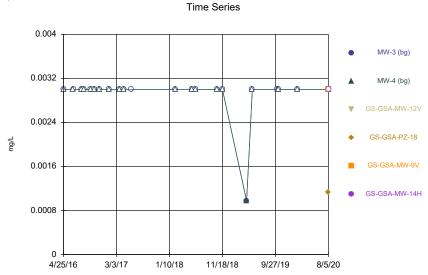
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Time Series



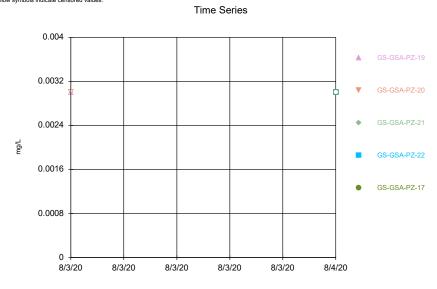
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Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



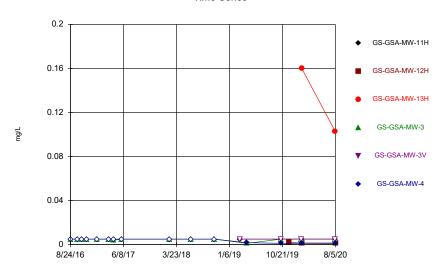
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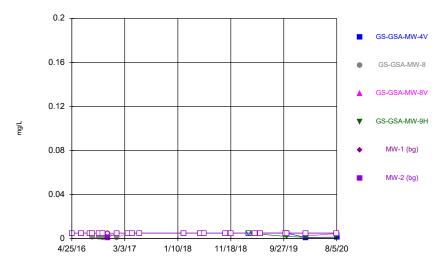


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Plant Gorgas Client: Southern Company Data: Gorgas GSA



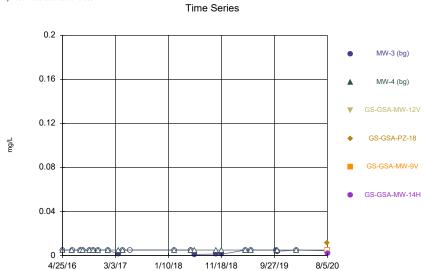


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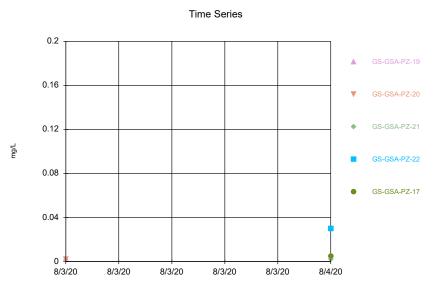
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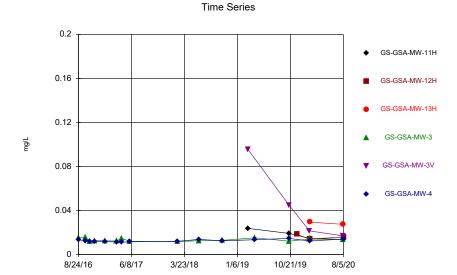


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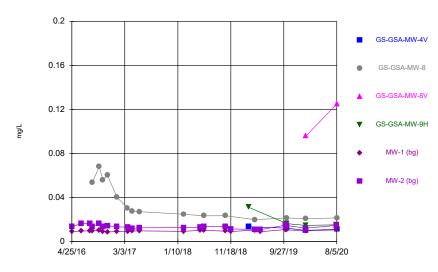
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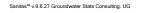
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

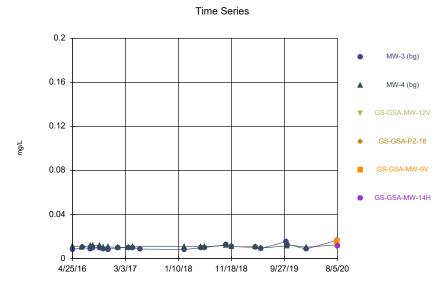


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Plant Gorgas Client: Southern Company Data: Gorgas GSA



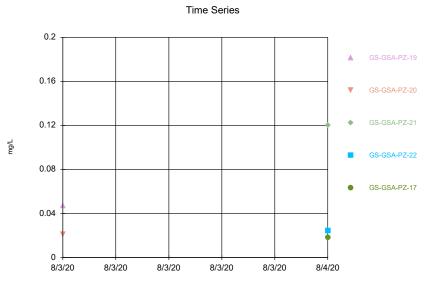
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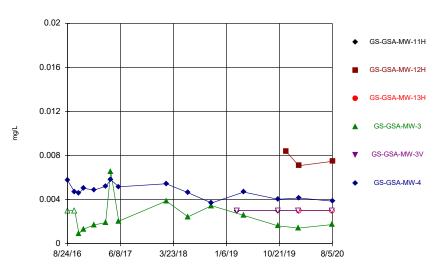
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Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

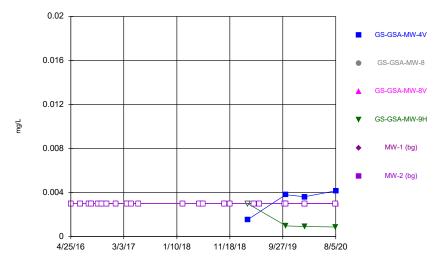


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Plant Gorgas Client: Southern Company Data: Gorgas GSA



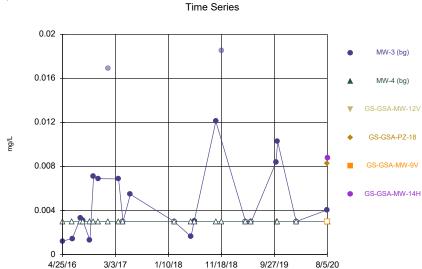


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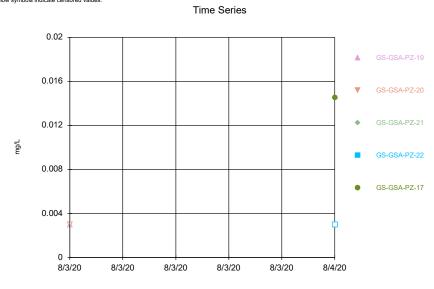
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Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



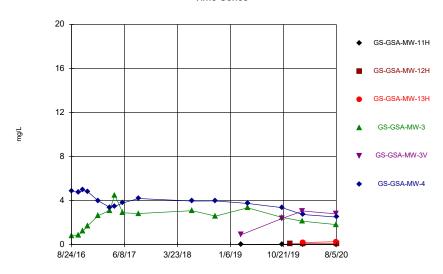
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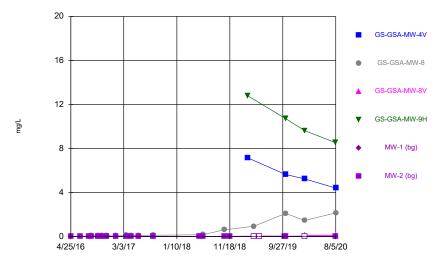


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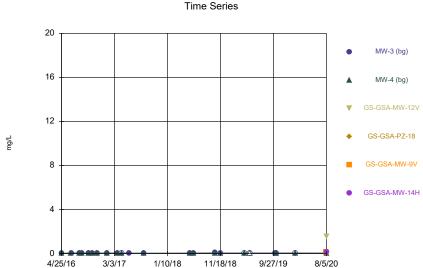


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Plant Gorgas Client: Southern Company Data: Gorgas GSA



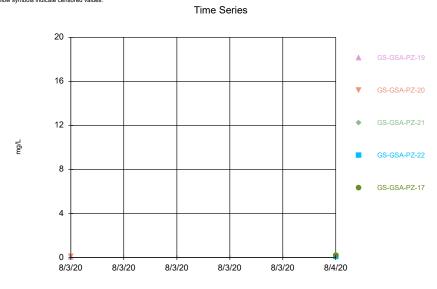
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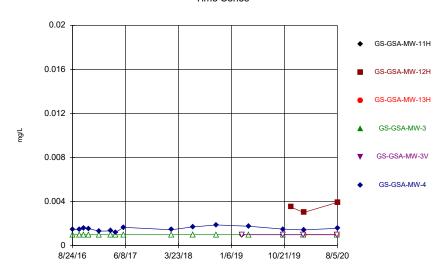
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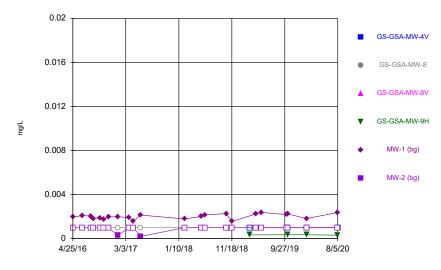


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Plant Gorgas Client: Southern Company Data: Gorgas GSA



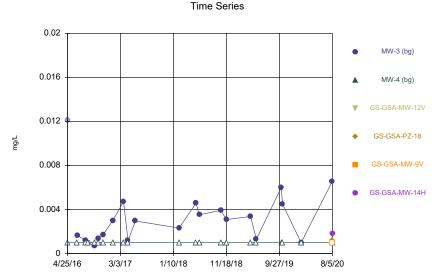


Constituent: Cadmium Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



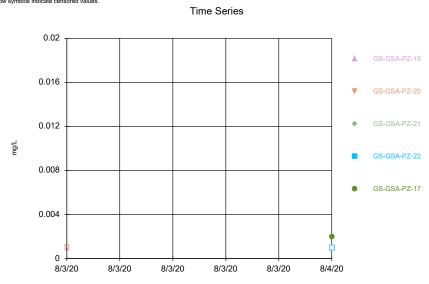
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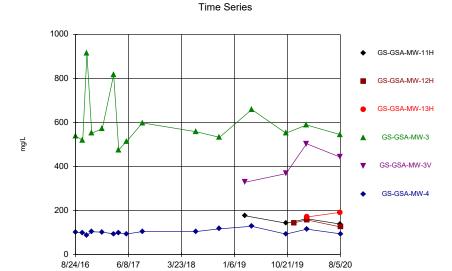


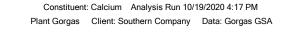
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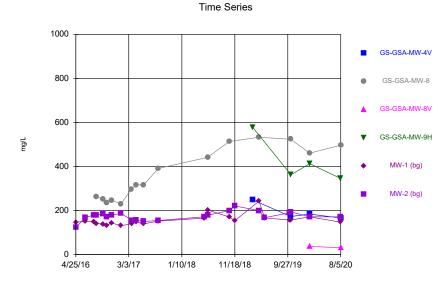
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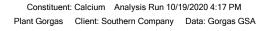


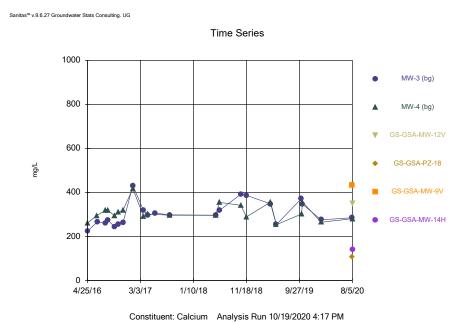
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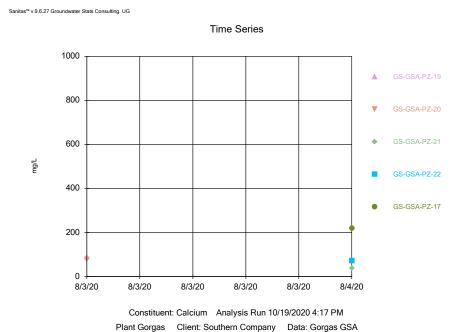






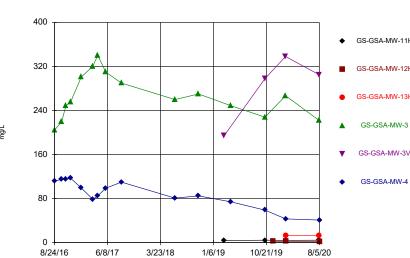


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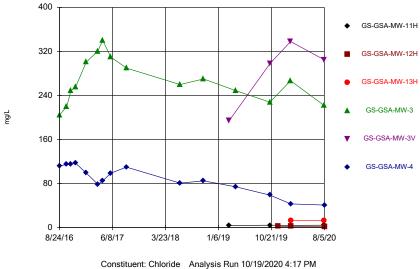


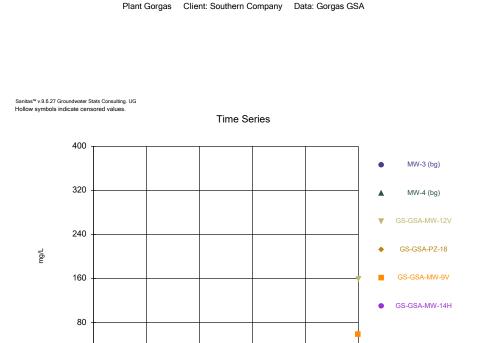
4/25/16

3/3/17



Time Series





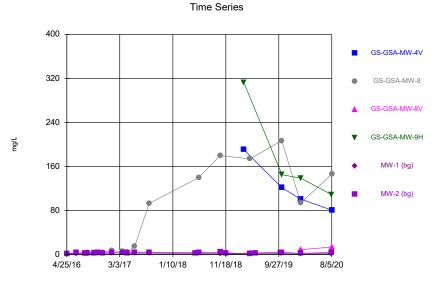
Constituent: Chloride Analysis Run 10/19/2020 4:17 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

11/18/18

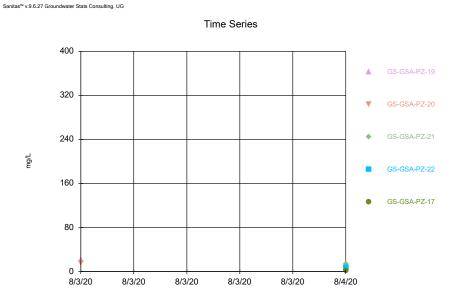
9/27/19

8/5/20

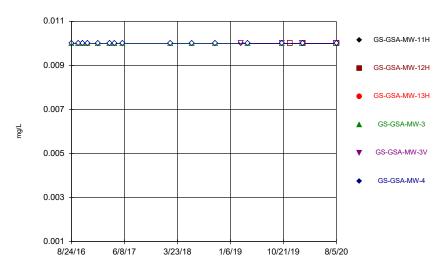
1/10/18



Constituent: Chloride Analysis Run 10/19/2020 4:17 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

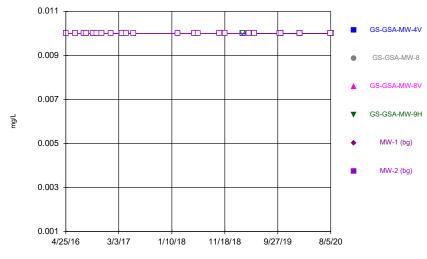


Constituent: Chloride Analysis Run 10/19/2020 4:17 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA



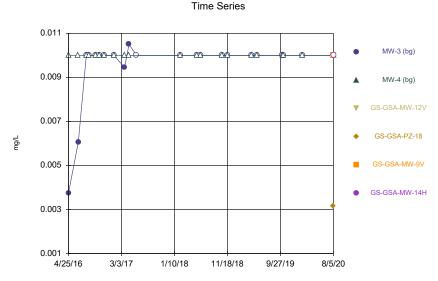
Constituent: Chromium Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



Constituent: Chromium Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

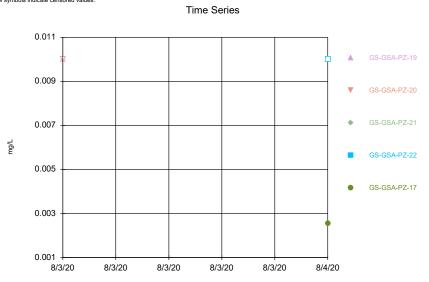
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Chromium Analysis Run 10/19/2020 4:17 PM

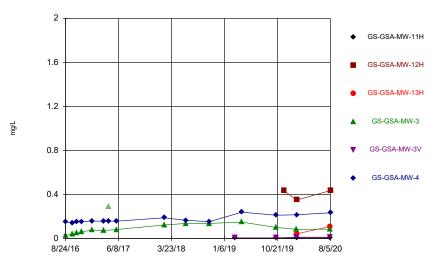
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

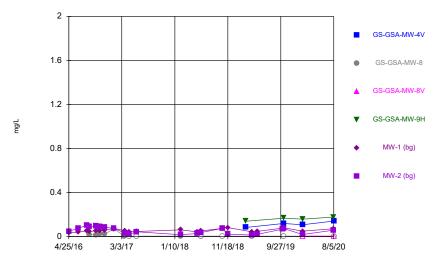


Constituent: Chromium Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



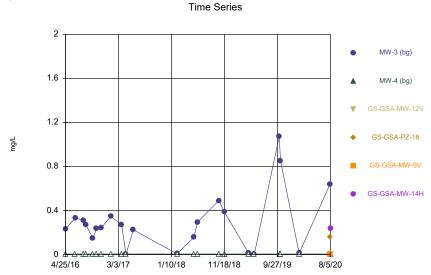


Constituent: Cobalt Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



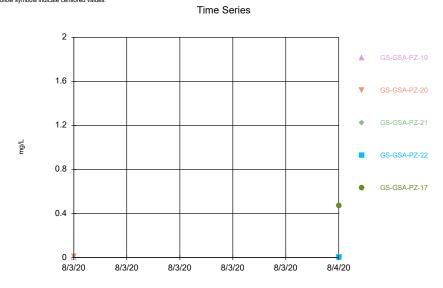
Constituent: Cobalt Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

-0.4

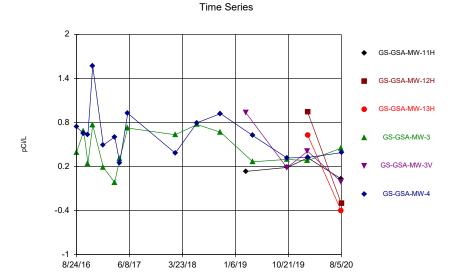
8/24/16

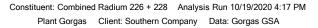
6/8/17

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

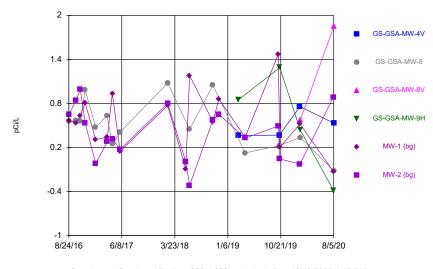
8/3/20

8/3/20



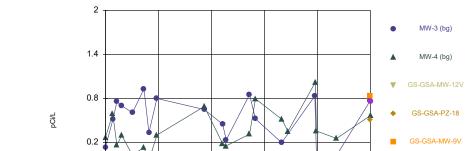


Time Series



Time Series

Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2020 4:17 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

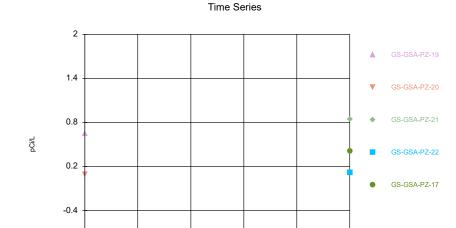
1/6/19

10/21/19

8/5/20

3/23/18

GS-GSA-MW-14H



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

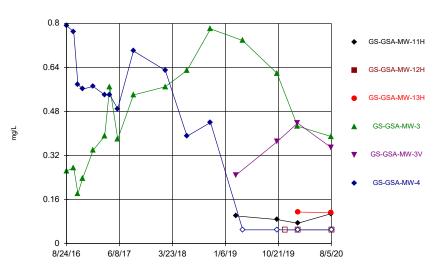
8/3/20

8/3/20

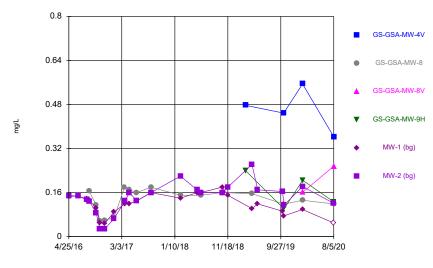
8/4/20

8/3/20



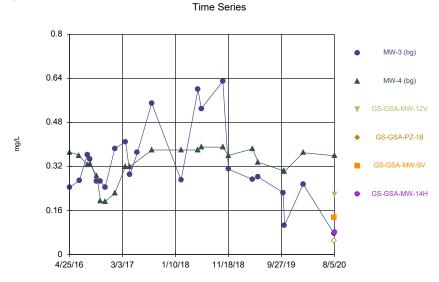


Constituent: Fluoride Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



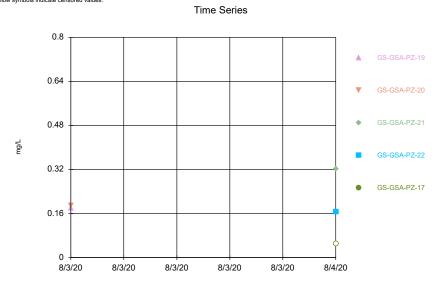
Constituent: Fluoride Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



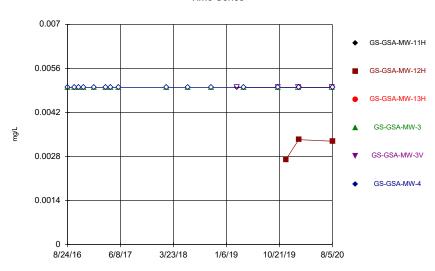
Constituent: Fluoride Analysis Run 10/19/2020 4:17 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

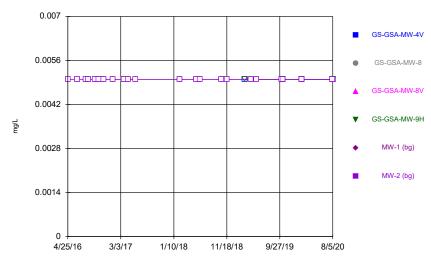


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Plant Gorgas Client: Southern Company Data: Gorgas GSA



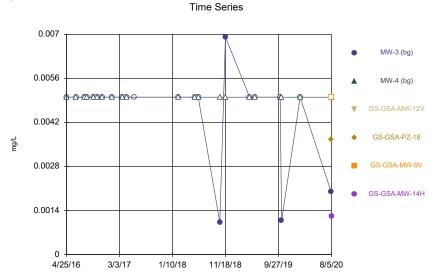


Constituent: Lead Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



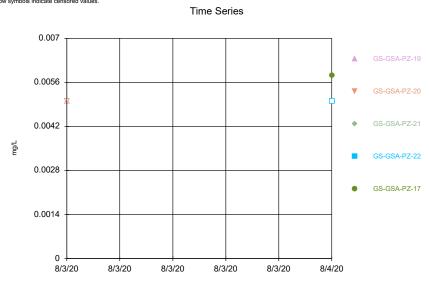
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

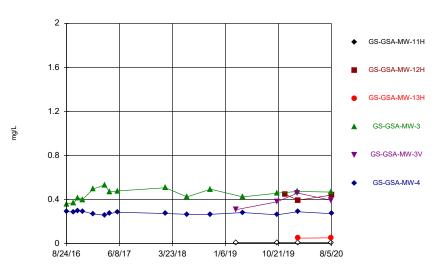


Constituent: Lead Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

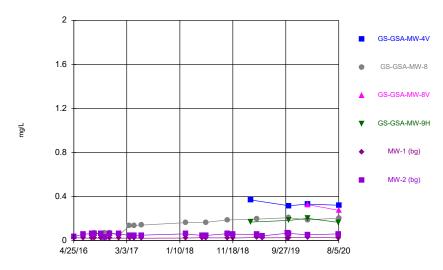


Constituent: Lead Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



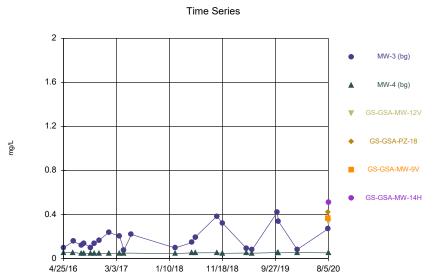
Constituent: Lithium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



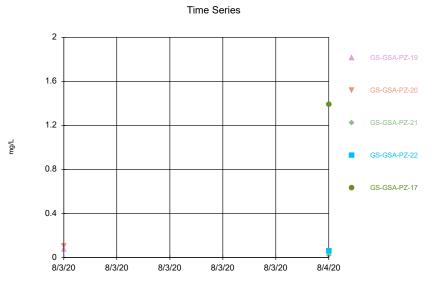
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas[™] v.9.6.27 Groundwater Stats Consulting. UG



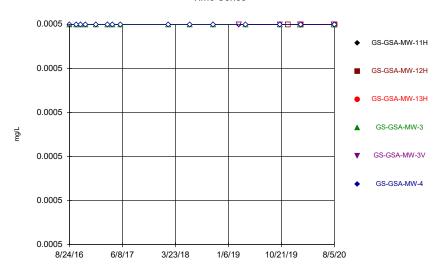
Constituent: Lithium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

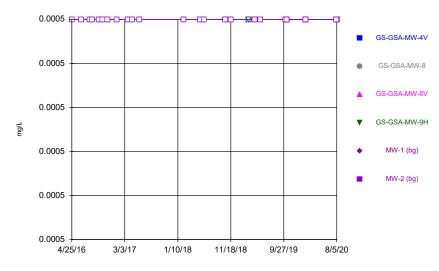


Constituent: Lithium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



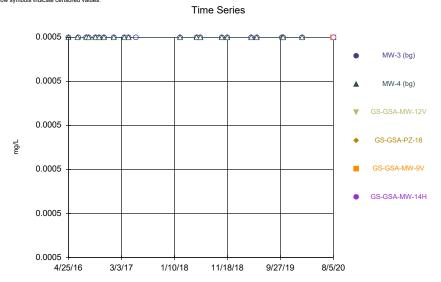


Constituent: Mercury Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



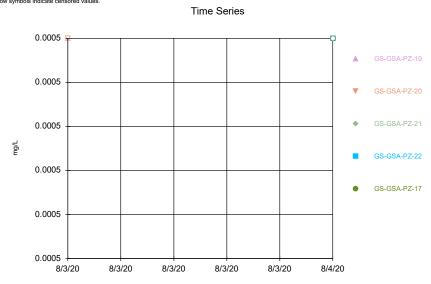
Constituent: Mercury Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

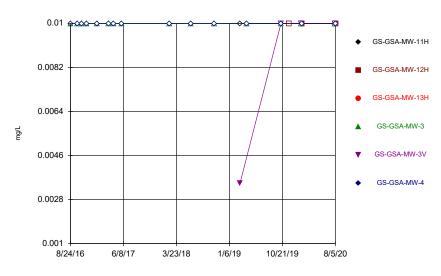


Constituent: Mercury Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

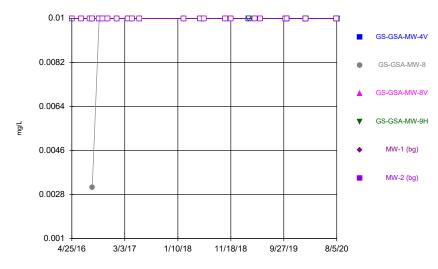


Constituent: Mercury Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



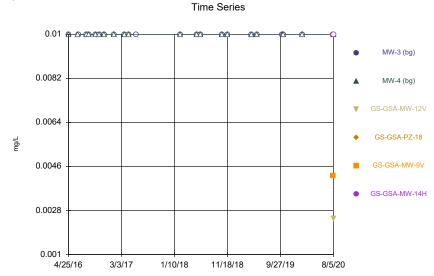
Constituent: Molybdenum Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



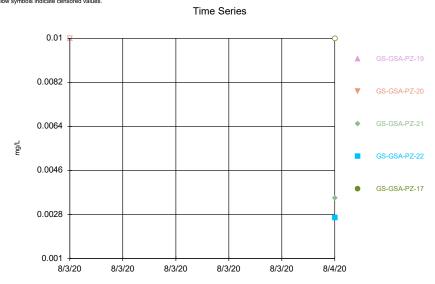
Constituent: Molybdenum Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

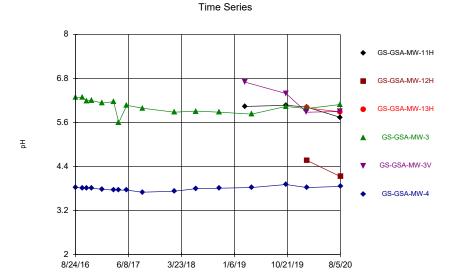


Constituent: Molybdenum Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Molybdenum Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



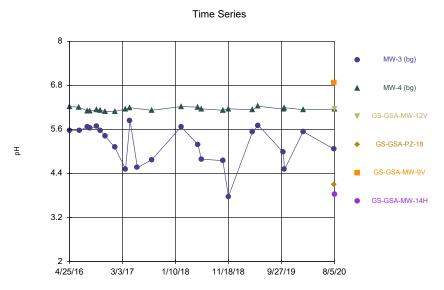
Constituent: pH Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-MW-8V GS-GSA-MW-8V GS-GSA-MW-9H 4.4 MW-1 (bg) MW-2 (bg)

Time Series

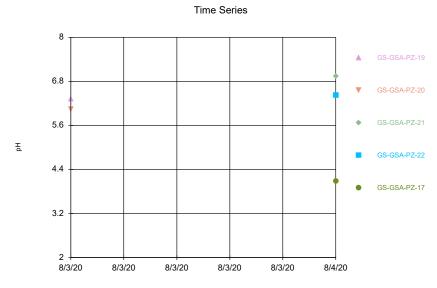
Constituent: pH Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA





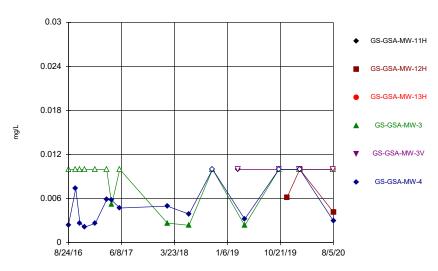
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

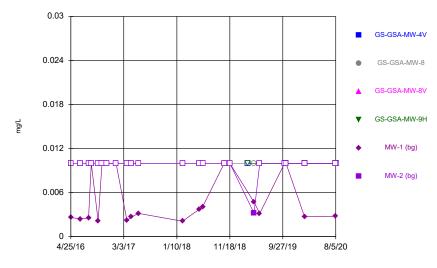


Constituent: pH Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



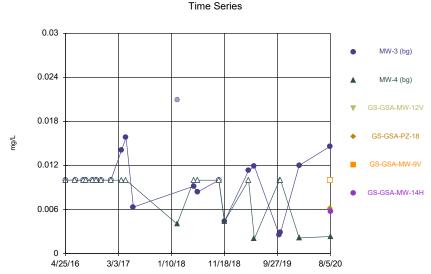


Constituent: Selenium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



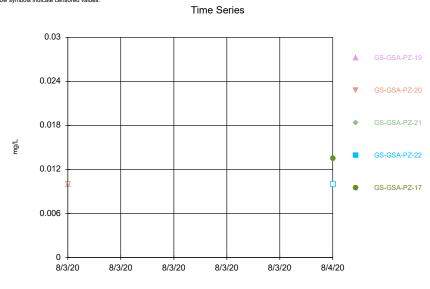
Constituent: Selenium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Selenium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Selenium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

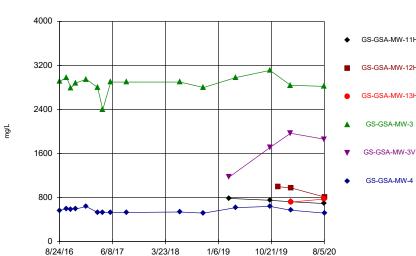
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

800

4/25/16

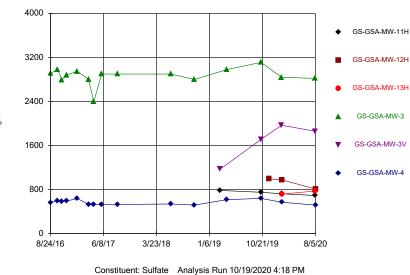
3/3/17

1/10/18



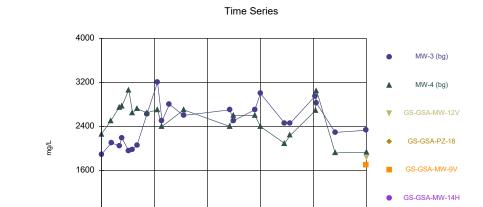
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



4000 GS-GSA-MW-4V 3200 GS-GSA-MW-8 GS-GSA-MW-8V 2400 GS-GSA-MW-9H mg/L 1600 MW-1 (bg) MW-2 (bg) 800 4/25/16 3/3/17 1/10/18 11/18/18 9/27/19 8/5/20 Constituent: Sulfate Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series



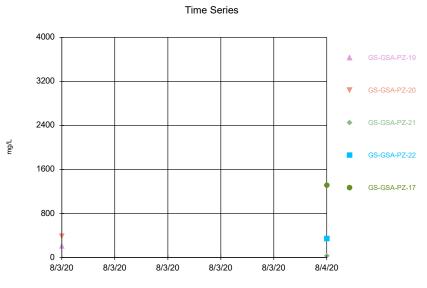
Constituent: Sulfate Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

11/18/18

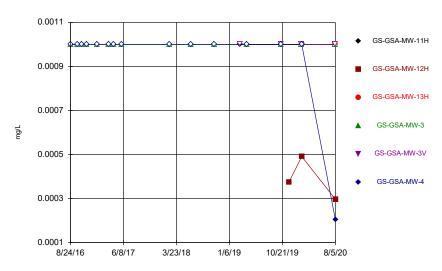
9/27/19

8/5/20



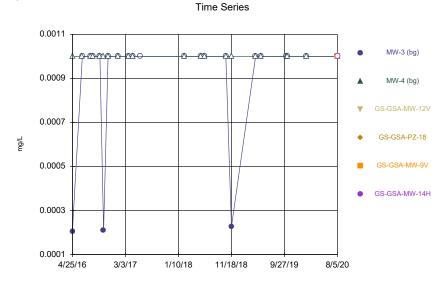


Constituent: Sulfate Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA



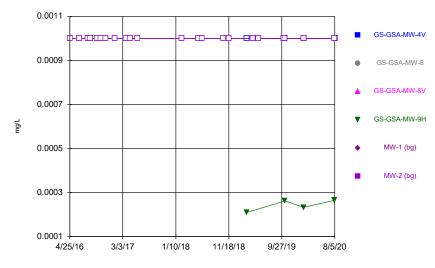
Constituent: Thallium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



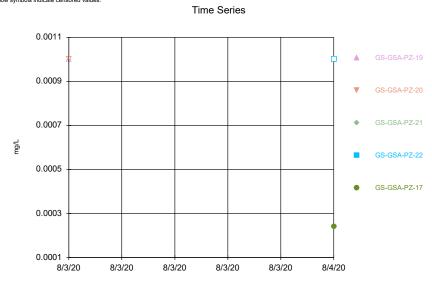
Constituent: Thallium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

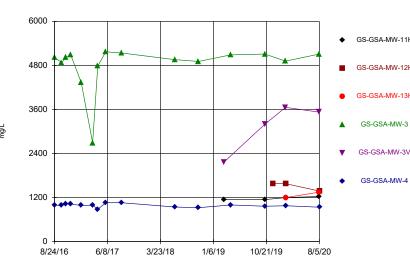


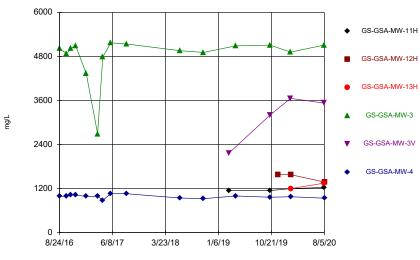
Constituent: Thallium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

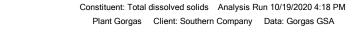
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Thallium Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

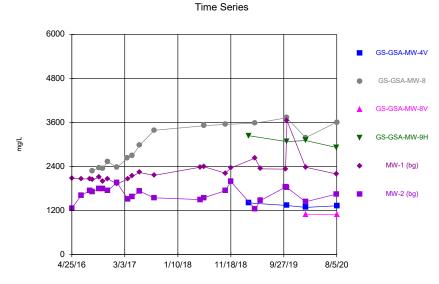






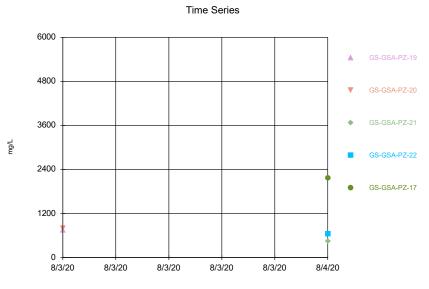
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Time Series 6000 MW-3 (bg) 4800 MW-4 (bg) GS-GSA-MW-12V 3600 GS-GSA-PZ-18 mg/L 2400 GS-GSA-MW-9V GS-GSA-MW-14H 1200 4/25/16 3/3/17 1/10/18 11/18/18 9/27/19 8/5/20

Constituent: Total dissolved solids Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Total dissolved solids Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA





Constituent: Total dissolved solids Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

Constituent: Antimony (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.003		<0.003
10/3/2016				<0.003		<0.003
10/26/2016				<0.003		<0.003
11/21/2016				<0.003		<0.003
1/17/2017				<0.003		<0.003
3/20/2017				<0.003		
3/21/2017						<0.003
4/17/2017				<0.003		<0.003
5/30/2017				<0.003		<0.003
2/13/2018				<0.003		<0.003
6/11/2018				<0.003		<0.003
10/17/2018				<0.003		<0.003
3/4/2019	0.00149 (J)					
3/5/2019					0.00179 (J)	
4/10/2019				0.00111 (J)		0.000976 (J)
10/14/2019				<0.003	<0.003	<0.003
10/16/2019	<0.003					
11/26/2019		<0.003				
2/3/2020				<0.003	<0.003	
2/4/2020	<0.003	<0.003	<0.003			<0.003
8/4/2020	<0.003		<0.003	<0.003	<0.003	
8/5/2020		<0.003				<0.003

Constituent: Antimony (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.003
4/26/2016					<0.003	
6/20/2016					<0.003	<0.003
8/8/2016					<0.003	<0.003
8/24/2016		<0.003			<0.003	<0.003
10/3/2016		<0.003			<0.003	<0.003
10/26/2016		<0.003			<0.003	<0.003
11/21/2016		<0.003			<0.003	<0.003
1/17/2017		<0.003			<0.003	<0.003
3/20/2017		<0.003				
3/22/2017					<0.003	<0.003
4/18/2017		<0.003			<0.003	<0.003
5/30/2017		<0.003			<0.003	
5/31/2017						<0.003
2/13/2018		<0.003			<0.003	<0.003
5/22/2018					<0.003	<0.003
6/12/2018		<0.003			<0.003	<0.003
10/17/2018		<0.003			<0.003	<0.003
11/19/2018					<0.003	<0.003
3/5/2019	<0.003			0.000852 (J)		
4/10/2019		0.00102 (J)			0.00143 (J)	0.000993 (J)
5/14/2019					0.00137 (J)	0.000989 (J)
10/8/2019					<0.003	<0.003
10/14/2019	<0.003	<0.003				
10/16/2019				<0.003	<0.003	<0.003
2/3/2020	<0.003				<0.003	<0.003
2/4/2020		<0.003		<0.003		
2/5/2020			<0.003			
8/3/2020					<0.003	<0.003
8/4/2020				<0.003		
8/5/2020	<0.003	<0.003	<0.003			

Constituent: Antimony (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	<0.003	<0.003				
6/20/2016		<0.003				
6/22/2016	<0.003					
8/9/2016	<0.003	<0.003				
8/24/2016	<0.003	<0.003				
10/3/2016		<0.003				
10/4/2016	<0.003					
10/26/2016	<0.003	<0.003				
11/21/2016	<0.003	<0.003				
1/18/2017	<0.003	<0.003				
3/22/2017	<0.003	<0.003				
4/18/2017	<0.003	<0.003				
5/31/2017	<0.003					
2/13/2018	<0.003	<0.003				
5/23/2018		<0.003				
5/24/2018	<0.003					
6/12/2018	<0.003	<0.003				
10/17/2018	<0.003	<0.003				
11/19/2018	<0.003	<0.003				
4/10/2019	0.000978 (J)	0.00097 (J)				
5/14/2019	<0.003	<0.003				
10/8/2019	<0.003					
10/10/2019		<0.003				
10/16/2019	<0.003	<0.003				
2/3/2020	<0.003	<0.003				
8/3/2020	<0.003			0.00113 (J)		
8/4/2020					<0.003	
8/5/2020		<0.003	<0.003			<0.003

Constituent: Antimony (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 8/3/2020 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.003 <0.00

Constituent: Arsenic (mg/L) Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.005		<0.005
10/3/2016				<0.005		<0.005
10/26/2016				<0.005		<0.005
11/21/2016				<0.005		<0.005
1/17/2017				<0.005		<0.005
3/20/2017				<0.005		
3/21/2017						<0.005
4/17/2017				0.00405 (J)		<0.005
5/30/2017				<0.005		<0.005
2/13/2018				<0.005		<0.005
6/11/2018				<0.005		<0.005
10/17/2018				<0.005		<0.005
3/4/2019	<0.005					
3/5/2019					<0.005	
4/10/2019				0.00121 (J)		0.00176 (J)
10/14/2019				<0.005	<0.005	0.0012 (J)
10/16/2019	<0.005					
11/26/2019		0.00194 (J)				
2/3/2020				<0.005	<0.005	
2/4/2020	<0.005	0.00157 (J)	0.16			0.00128 (J)
8/4/2020	<0.005		0.103	<0.005	<0.005	
8/5/2020		0.00158 (J)				0.00115 (J)

Constituent: Arsenic (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.005
4/26/2016					<0.005	
6/20/2016					<0.005	<0.005
8/8/2016					<0.005	<0.005
8/24/2016		0.00119 (J)			<0.005	<0.005
10/3/2016		0.00114 (J)			<0.005	<0.005
10/26/2016		0.0011 (J)			<0.005	<0.005
11/21/2016		<0.005			<0.005	0.00111 (J)
1/17/2017		0.00103 (J)			<0.005	<0.005
3/20/2017		<0.005				
3/22/2017					<0.005	<0.005
4/18/2017		<0.005			<0.005	<0.005
5/30/2017		<0.005			<0.005	
5/31/2017						<0.005
2/13/2018		<0.005			<0.005	<0.005
5/22/2018					<0.005	<0.005
6/12/2018		<0.005			<0.005	<0.005
10/17/2018		<0.005			<0.005	<0.005
11/19/2018					<0.005	<0.005
3/5/2019	<0.005			<0.005		
4/10/2019		<0.005			<0.005	<0.005
5/14/2019					<0.005	<0.005
10/8/2019					<0.005	<0.005
10/14/2019	<0.005	<0.005				
10/16/2019				0.0019 (J)	<0.005	<0.005
2/3/2020	0.00101 (J)				<0.005	<0.005
2/4/2020		<0.005		0.00123 (J)		
2/5/2020			0.00232 (J)			
8/3/2020					<0.005	<0.005
8/4/2020				0.00137 (J)		
8/5/2020	0.00116 (J)	<0.005	0.00476 (J)			

Constituent: Arsenic (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H	
4/25/2016	<0.005	<0.005					
6/20/2016		<0.005					
6/22/2016	<0.005						
8/9/2016	<0.005	<0.005					
8/24/2016	<0.005	<0.005					
10/3/2016		<0.005					
10/4/2016	<0.005						
10/26/2016	<0.005	<0.005					
11/21/2016	<0.005	<0.005					
1/18/2017	<0.005	<0.005					
3/22/2017	0.00122 (J)	<0.005					
4/18/2017	<0.005	<0.005					
5/31/2017	<0.005						
2/13/2018	<0.005	<0.005					
5/23/2018		<0.005					
5/24/2018	<0.005						
6/12/2018	0.00103 (J)	<0.005					
10/17/2018	0.00133 (J)	<0.005					
11/19/2018	0.0012 (J)	<0.005					
4/10/2019	<0.005	<0.005					
5/14/2019	<0.005	<0.005					
10/8/2019	0.0048 (J)						
10/10/2019		<0.005					
10/16/2019	0.00389 (J)	<0.005					
2/3/2020	<0.005	<0.005					
8/3/2020	0.00426 (J)			0.0114			
8/4/2020					<0.005		
8/5/2020		<0.005	<0.005			0.00181 (J)	
						. ,	

Constituent: Arsenic (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17
8/3/2020 0.00279 (J) 0.00214 (J) 0.00204 (J) 0.0297 0.00495 (J)

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				0.0155		0.0135
10/3/2016				0.0156		0.0127
10/26/2016				0.0122		0.0118
11/21/2016				0.0128		0.012
1/17/2017				0.0125		0.0119
3/20/2017				0.0124		
3/21/2017						0.0116
4/17/2017				0.0149		0.0112
5/30/2017				0.0121		0.0117
2/13/2018				0.0118		0.0121
6/11/2018				0.0127		0.0139
10/17/2018				0.013		0.0125
3/4/2019	0.0239					
3/5/2019					0.0956	
4/10/2019				0.0153		0.0136
10/14/2019				0.0122	0.0451	0.0147
10/16/2019	0.0192					
11/26/2019		0.0184				
2/3/2020				0.0141	0.0215	
2/4/2020	0.0148	0.0141	0.0296			0.0124
8/4/2020	0.0138		0.0275	0.0139	0.017	
8/5/2020		0.016				0.0142

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						0.0134
4/26/2016					0.00941 (J)	
6/20/2016					0.00951 (J)	0.0165
8/8/2016					0.00991 (J)	0.0162
8/24/2016		0.0536			0.00949 (J)	0.0139
10/3/2016		0.0681			0.0105	0.0164
10/26/2016		0.0562			0.00931 (J)	0.0138
11/21/2016		0.0604			0.00879 (J)	0.0144
1/17/2017		0.0402			0.00929 (J)	0.0135
3/20/2017		0.0305				
3/22/2017					0.00938 (J)	0.0132
4/18/2017		0.0276			0.00964 (J)	0.012
5/30/2017		0.0272			0.00982 (J)	
5/31/2017						0.0126
2/13/2018		0.0249			0.00937 (J)	0.0127
5/22/2018					0.0102	0.0131
6/12/2018		0.0234			0.0104	0.0138
10/17/2018		0.0236			0.00952 (J)	0.0137
11/19/2018					0.00915 (J)	0.0115
3/5/2019	0.0136			0.0312		
4/10/2019		0.02			0.0105	0.0111
5/14/2019					0.00913 (J)	0.0109
10/8/2019					0.0109	0.0151
10/14/2019	0.0123	0.0215				
10/16/2019				0.0163	0.0106	0.0146
2/3/2020	0.0103				0.00995 (J)	0.0122
2/4/2020		0.0209		0.0148		
2/5/2020			0.096			
8/3/2020					0.0107	0.0147
8/4/2020				0.0153		
8/5/2020	0.0112	0.0216	0.125			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H	
4/25/2016	0.00803 (J)	0.0114					
6/20/2016		0.0103					
6/22/2016	0.0101						
8/9/2016	0.00889 (J)	0.0119					
8/24/2016	0.00962 (J)	0.0118					
10/3/2016		0.0119					
10/4/2016	0.00984 (J)						
10/26/2016	0.00878 (J)	0.0104					
11/21/2016	0.00833 (J)	0.0106					
1/18/2017	0.00966 (J)	0.0101					
3/22/2017	0.00991 (J)	0.0103					
4/18/2017	0.00976 (J)	0.0107					
5/31/2017	0.00866 (J)						
2/13/2018	0.00821 (J)	0.0111					
5/23/2018		0.0107					
5/24/2018	0.00977 (J)						
6/12/2018	0.00997 (J)	0.0108					
10/17/2018	0.0126	0.0119					
11/19/2018	0.0109	0.0107					
4/10/2019	0.0101	0.0107					
5/14/2019	0.00922 (J)	0.00949 (J)					
10/8/2019	0.0154						
10/10/2019		0.0116					
10/16/2019	0.0128	0.0125					
2/3/2020	0.0086 (J)	0.0103					
8/3/2020	0.0166			0.0111			
8/4/2020					0.0155		
8/5/2020		0.0125	0.0157			0.0113	

Constituent: Barium (mg/L) Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17
8/3/2020 0.047 0.0211
8/4/2020 0.0243 0.0181

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.003		0.00576
10/3/2016				<0.003		0.00469
10/26/2016				0.000922 (J)		0.00459
11/21/2016				0.00133 (J)		0.00502
1/17/2017				0.0017 (J)		0.00488
3/20/2017				0.00191 (J)		
3/21/2017						0.00521
4/17/2017				0.00655		0.0058
5/30/2017				0.00204 (J)		0.00517
2/13/2018				0.00387		0.00544
6/11/2018				0.00244 (J)		0.00463
10/17/2018				0.00345		0.00369
3/4/2019	<0.003					
3/5/2019					<0.003	
4/10/2019				0.00257 (J)		0.00469
10/14/2019				0.00162 (J)	<0.003	0.00403
10/16/2019	<0.003					
11/26/2019		0.0084				
2/3/2020				0.00141 (J)	<0.003	
2/4/2020	<0.003	0.00709	<0.003			0.00415
8/4/2020	<0.003		<0.003	0.00174 (J)	<0.003	
8/5/2020		0.00747				0.00385

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.003
4/26/2016					<0.003	
6/20/2016					<0.003	<0.003
8/8/2016					<0.003	<0.003
8/24/2016		<0.003			<0.003	<0.003
10/3/2016		<0.003			<0.003	<0.003
10/26/2016		<0.003			<0.003	<0.003
11/21/2016		<0.003			<0.003	<0.003
1/17/2017		<0.003			<0.003	<0.003
3/20/2017		<0.003				
3/22/2017					<0.003	<0.003
4/18/2017		<0.003			<0.003	<0.003
5/30/2017		<0.003			<0.003	
5/31/2017						<0.003
2/13/2018		<0.003			<0.003	<0.003
5/22/2018					<0.003	<0.003
6/12/2018		<0.003			<0.003	<0.003
10/17/2018		<0.003			<0.003	<0.003
11/19/2018					<0.003	<0.003
3/5/2019	0.00155 (J)			<0.003		
4/10/2019		<0.003			<0.003	<0.003
5/14/2019					<0.003	<0.003
10/8/2019					<0.003	<0.003
10/14/2019	0.00382	<0.003				
10/16/2019				0.000985 (J)	<0.003	<0.003
2/3/2020	0.00362				<0.003	<0.003
2/4/2020		<0.003		0.000929 (J)		
2/5/2020			<0.003			
8/3/2020					<0.003	<0.003
8/4/2020				0.000882 (J)		
8/5/2020	0.00416	<0.003	<0.003			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	0.00122 (J)	<0.003				
6/20/2016		<0.003				
6/22/2016	0.00144 (J)					
8/9/2016	0.00331	<0.003				
8/24/2016	0.00308	<0.003				
10/3/2016		<0.003				
10/4/2016	0.00129 (J)					
10/26/2016	0.0071	<0.003				
11/21/2016	0.00689	<0.003				
1/18/2017	0.0169 (o)	<0.003				
3/22/2017	0.00686	<0.003				
4/18/2017	<0.003	<0.003				
5/31/2017	0.00547					
2/13/2018	<0.003	<0.003				
5/23/2018		<0.003				
5/24/2018	0.00164 (J)					
6/12/2018	0.00306	<0.003				
10/17/2018	0.0121	<0.003				
11/19/2018	0.0185 (o)	<0.003				
4/10/2019	<0.003	<0.003				
5/14/2019	<0.003	<0.003				
10/8/2019	0.0084					
10/10/2019		<0.003				
10/16/2019	0.0103	<0.003				
2/3/2020	<0.003	<0.003				
8/3/2020	0.00405			0.00829		
8/4/2020					<0.003	
8/5/2020		<0.003	<0.003			0.00879

Constituent: Beryllium (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 8/3/2020 <0.003 <0.003 <0.003 <0.003 0.0145

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				0.799		4.88
10/3/2016				0.889		4.75
10/26/2016				1.23		4.96
11/21/2016				1.72		4.82
1/17/2017				2.63		3.97
3/20/2017				3.11		
3/21/2017						3.39
4/17/2017				4.51		3.46
5/30/2017				2.9		3.79
8/24/2017				2.83		4.19
6/11/2018				3.09		3.96
10/17/2018				2.59		3.98
3/4/2019	0.0235 (J)					
3/5/2019					0.895	
4/10/2019				3.35		3.74
10/14/2019				2.48	2.38	3.37
10/16/2019	0.0352 (J)					
11/26/2019		0.0798 (J)				
2/3/2020				2.13	3.06	
2/4/2020	<0.1	0.0748 (J)	0.202			2.74
8/4/2020	<0.1		0.263	1.82	2.8	
8/5/2020		0.0748 (J)				2.51

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						0.0241 (J)
4/26/2016					0.0231 (J)	
6/20/2016					0.0227 (J)	0.0284 (J)
8/8/2016					0.0278 (J)	0.034 (J)
8/24/2016		0.0898 (J)			0.0247 (J)	0.0316 (J)
10/3/2016		0.0821 (J)			0.0307 (J)	0.0367 (J)
10/26/2016		0.0889 (J)			0.0241 (J)	0.0331 (J)
11/21/2016		0.0788 (J)			0.0202 (J)	0.035 (J)
1/17/2017		0.0607 (J)			0.0201 (J)	0.0259 (J)
3/20/2017		0.114				
3/22/2017					0.0224 (J)	0.0243 (J)
4/18/2017		0.108			<0.1	0.0206 (J)
5/30/2017		0.105			<0.1	
5/31/2017						0.0234 (J)
8/23/2017					0.0253 (J)	0.0267 (J)
8/24/2017		0.12				
5/22/2018					0.0224 (J)	0.0251 (J)
6/12/2018		0.181			0.0214 (J)	0.0275 (J)
10/17/2018		0.616			0.0216 (J)	0.0321 (J)
11/19/2018					0.0237 (J)	0.0324 (J)
3/5/2019	7.15			12.8		
4/10/2019		0.944			0.0304 (J)	<0.1
5/14/2019					<0.1	<0.1
10/8/2019					<0.1	0.0371 (J)
10/14/2019	5.64	2.11				
10/16/2019				10.7	0.0385 (J)	0.0419 (J)
2/3/2020	5.25				<0.1	<0.1
2/4/2020		1.47		9.63		
2/5/2020			0.136			
8/3/2020					<0.1	0.0317 (J)
8/4/2020				8.53		
8/5/2020	4.41	2.16	0.131			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H	
4/25/2016	0.028 (J)	0.0414 (J)					
6/20/2016		0.0434 (J)					
6/22/2016	0.0433 (J)						
8/9/2016	0.0429 (J)	0.0453 (J)					
8/24/2016	0.0431 (J)	0.0451 (J)					
10/3/2016		0.0511 (J)					
10/4/2016	0.04 (J)						
10/26/2016	0.0375 (J)	0.0507 (J)					
11/21/2016	0.0406 (J)	0.0458 (J)					
1/18/2017	0.0548 (J)	0.0445 (J)					
3/22/2017	0.0344 (J)	0.0432 (J)					
4/18/2017	<0.1	0.0409 (J)					
5/31/2017	0.0454 (J)						
8/23/2017	0.0425 (J)	0.042 (J)					
5/23/2018		0.0433 (J)					
5/24/2018	0.0339 (J)						
6/12/2018	0.0371 (J)	0.0478 (J)					
10/17/2018	0.0596 (J)	0.0468 (J)					
11/19/2018	0.0514 (J)	0.0526 (J)					
4/10/2019	<0.1	0.0438 (J)					
5/14/2019	<0.1	<0.1					
10/8/2019	0.0537 (J)						
10/10/2019		0.0487 (J)					
10/16/2019	0.05 (J)	0.0505 (J)					
2/3/2020	<0.1	0.0433 (J)					
8/3/2020	0.0424 (J)			0.0671 (J)			
8/4/2020					0.149		
8/5/2020		0.0459 (J)	1.55			0.158	

	GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	GS-GSA-PZ-17
8/3/2020	0.0553 (J)	0.0833 (J)			
8/4/2020			<0.1	0.108	0.168

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.001		0.00148
10/3/2016				<0.001		0.00147
10/26/2016				<0.001		0.00157
11/21/2016				<0.001		0.00154
1/17/2017				<0.001		0.00131
3/20/2017				<0.001		
3/21/2017						0.00134
4/17/2017				<0.001		0.00122
5/30/2017				<0.001		0.00167
2/13/2018				<0.001		0.00145
6/11/2018				<0.001		0.00171
10/17/2018				<0.001		0.00188
3/4/2019	<0.001					
3/5/2019					<0.001	
4/10/2019				<0.001		0.00176
10/14/2019				<0.001	<0.001	0.0015
10/16/2019	<0.001					
11/26/2019		0.00351				
2/3/2020				<0.001	<0.001	
2/4/2020	<0.001	0.00301	<0.001			0.00143
8/4/2020	<0.001		<0.001	<0.001	<0.001	
8/5/2020		0.00393				0.00157

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.001
4/26/2016					0.00196	
6/20/2016					0.0021	<0.001
8/8/2016					0.00206	<0.001
8/24/2016		<0.001			0.00182	<0.001
10/3/2016		<0.001			0.00188	<0.001
10/26/2016		<0.001			0.00175	<0.001
11/21/2016		<0.001			0.00197	<0.001
1/17/2017		<0.001			0.002	0.000311 (J)
3/20/2017		<0.001				
3/22/2017					0.0019	<0.001
4/18/2017		<0.001			0.00159	<0.001
5/30/2017		<0.001			0.00214	
5/31/2017						0.000212 (J)
2/13/2018		<0.001			0.0018	<0.001
5/22/2018					0.00201	<0.001
6/12/2018		<0.001			0.00217	<0.001
10/17/2018		<0.001			0.00228	<0.001
11/19/2018					0.00156	<0.001
3/5/2019	<0.001			0.000336 (J)		
4/10/2019		<0.001			0.00224	<0.001
5/14/2019					0.00238	<0.001
10/8/2019					0.00218	<0.001
10/14/2019	<0.001	<0.001				
10/16/2019				0.000362 (J)	0.00225	<0.001
2/3/2020	<0.001				0.00182	<0.001
2/4/2020		<0.001		0.000349 (J)		
2/5/2020			<0.001			
8/3/2020					0.00237	<0.001
8/4/2020				0.000308 (J)		
8/5/2020	<0.001	<0.001	<0.001			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	0.0121 (o)	<0.001				
6/20/2016		<0.001				
6/22/2016	0.00163					
8/9/2016	0.00122	<0.001				
8/24/2016	<0.001	<0.001				
10/3/2016		<0.001				
10/4/2016	0.000689 (J)					
10/26/2016	0.00136	<0.001				
11/21/2016	0.00171	<0.001				
1/18/2017	0.003	<0.001				
3/22/2017	0.00473	<0.001				
4/18/2017	0.00117	<0.001				
5/31/2017	0.00296					
2/13/2018	0.00232	<0.001				
5/23/2018		<0.001				
5/24/2018	0.00459					
6/12/2018	0.00351	<0.001				
10/17/2018	0.00393	<0.001				
11/19/2018	0.00309	<0.001				
4/10/2019	0.00337	<0.001				
5/14/2019	0.0013	<0.001				
10/8/2019	0.00598					
10/10/2019		<0.001				
10/16/2019	0.00448	<0.001				
2/3/2020	0.000988 (J)	<0.001				
8/3/2020	0.00652			0.0012		
8/4/2020					<0.001	
8/5/2020		<0.001	<0.001			0.0018

Constituent: Cadmium (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 8/3/2020 <0.001 <0.001 <0.001 <0.001 0.00197

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				539		102
10/3/2016				519.7		98.4
10/26/2016				916		88.7
11/21/2016				552		104
1/17/2017				572		102
3/20/2017				817		
3/21/2017						94.7
4/17/2017				476		97.9
5/30/2017				515		93.9
8/24/2017				598		105
6/11/2018				558		105
10/17/2018				533		117
3/4/2019	177					
3/5/2019					329	
4/10/2019				659		129
10/14/2019				552	368	93.5
10/16/2019	143					
11/26/2019		144				
2/3/2020				589	504	
2/4/2020	163	158	171			116
8/4/2020	139		192	545	443	
8/5/2020		126				94.7

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						123
4/26/2016					147	
6/20/2016					152	168
8/8/2016					150	180
8/24/2016		263			142	180
10/3/2016		253			139	184
10/26/2016		235			133	171
11/21/2016		246			144	179
1/17/2017		231			131	188
3/20/2017		298				
3/22/2017					141	155
4/18/2017		317			149	156
5/30/2017		316			140	
5/31/2017						151
8/23/2017					152	155
8/24/2017		391				
5/22/2018					166	172
6/12/2018		442			203	179
10/17/2018		514			171	200
11/19/2018					154	221
3/5/2019	249			578		
4/10/2019		533			243	200
5/14/2019					167	168
10/8/2019					157	190
10/14/2019	173	524				
10/16/2019				363	157	194
2/3/2020	184				172	172
2/4/2020		461		413		
2/5/2020			37.3			
8/3/2020					148	172
8/4/2020				346		
8/5/2020	167	497	31.9			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	224	261				
6/20/2016		295				
6/22/2016	266					
8/9/2016	260	318				
8/24/2016	274	319				
10/3/2016		293				
10/4/2016	243					
10/26/2016	254	311				
11/21/2016	263	320				
1/18/2017	431	417				
3/22/2017	318	292				
4/18/2017	296	302				
5/31/2017	306					
8/23/2017	298	297				
5/23/2018		296				
5/24/2018	297					
6/12/2018	318	355				
10/17/2018	392	342				
11/19/2018	387	289				
4/10/2019	348	356				
5/14/2019	254	254				
10/8/2019	371					
10/10/2019		302				
10/16/2019	346	356				
2/3/2020	276	265				
8/3/2020	285			106		
8/4/2020					434	
8/5/2020		281	350			141
		_+.				

	GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	GS-GSA-PZ-17
8/3/2020	88	76.9			
8/4/2020			36.4	70.4	218

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				204		112
10/3/2016				220		115
10/26/2016				249		115
11/21/2016				256		117
1/17/2017				301		99.3
3/20/2017				320		
3/21/2017						79
4/17/2017				340		85
5/30/2017				310		99
8/24/2017				290		110
6/11/2018				260		81
10/17/2018				270		85
3/4/2019	3.81					
3/5/2019					194	
4/10/2019				249		74.3
10/14/2019				228	298	59.1
10/16/2019	4.45					
11/26/2019		2.43				
2/3/2020				267	338	
2/4/2020	4.27	2.34	12.9			43.2
8/4/2020	4.51		12.7	222	305	
8/5/2020		2				41

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						1.9
4/26/2016					1.94	
6/20/2016					2.09	3.43
8/8/2016					2.18	3.31
8/24/2016		4.03			2.22	3.23
10/3/2016		3.87			2.34	3.21
10/26/2016		4.08			2.34	3.35
11/21/2016		4.39			2.5	3.34
1/17/2017		7.22			2.68	3.58
3/20/2017		5.7				
3/22/2017					3.7	3.4
4/18/2017		4.7			2.4	2.6
5/30/2017		15			2.6	
5/31/2017						4.4
8/23/2017					2.7	4.4
8/24/2017		93				
5/22/2018					2.3	3.2
6/12/2018		140			2.3	3.7
10/17/2018		180			1.7 (J)	4.6
11/19/2018					1.7 (J)	3
3/5/2019	191			313		
4/10/2019		174			2.36	1.76
5/14/2019					2.28	2.98
10/8/2019					2.31	4.26
10/14/2019	122	207				
10/16/2019				145	2.42	4.04
2/3/2020	101				2.07	2.48
2/4/2020		94.1		139		
2/5/2020			9.05			
8/3/2020					2.05	4.03
8/4/2020				109		
8/5/2020	80.9	146	13.9			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	1.32	1.53				
6/20/2016		1.85				
6/22/2016	1.46					
8/9/2016	1.35	1.95				
8/24/2016	1.47	2.07				
10/3/2016		2.02				
10/4/2016	1.59					
10/26/2016	1.27	2.07				
11/21/2016	1.38	2.39				
1/18/2017	1.34	1.9				
3/22/2017	2	1.5 (J)				
4/18/2017	2.2	1.6 (J)				
5/31/2017	1.5 (J)	. ,				
8/23/2017	1.8 (J)	2.3				
5/23/2018		2				
5/24/2018	1.6 (J)					
6/12/2018	1.4 (J)	1.7 (J)				
10/17/2018	<2	1.5 (J)				
11/19/2018	<2	<2				
4/10/2019	2.25	1.88				
5/14/2019	2.28	1.82				
10/8/2019	1.36	-				
10/10/2019		1.93				
10/16/2019	1.4	1.92				
2/3/2020	2.12	1.72				
8/3/2020	1.17	1.72		4.55		
8/4/2020	1.17			4.55	58.6	
8/5/2020		1.57	159		30.0	3.28
0/3/2020		1.0/	ເລສ			3.20

	GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	GS-GSA-PZ-17
8/3/2020	21.7	15			
8/4/2020			13.6	7.77	1.7

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.01		<0.01
10/3/2016				<0.01		<0.01
10/26/2016				<0.01		<0.01
11/21/2016				<0.01		<0.01
1/17/2017				<0.01		<0.01
3/20/2017				<0.01		
3/21/2017						<0.01
4/17/2017				<0.01		<0.01
5/30/2017				<0.01		<0.01
2/13/2018				<0.01		<0.01
6/11/2018				<0.01		<0.01
10/17/2018				<0.01		<0.01
3/4/2019	<0.01					
3/5/2019					<0.01	
4/10/2019				<0.01		<0.01
10/14/2019				<0.01	<0.01	<0.01
10/16/2019	<0.01					
11/26/2019		<0.01				
2/3/2020				<0.01	<0.01	
2/4/2020	<0.01	<0.01	<0.01			<0.01
8/4/2020	<0.01		<0.01	<0.01	<0.01	
8/5/2020		<0.01				<0.01

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.01
4/26/2016					<0.01	
6/20/2016					<0.01	<0.01
8/8/2016					<0.01	<0.01
8/24/2016		<0.01			<0.01	<0.01
10/3/2016		<0.01			<0.01	<0.01
10/26/2016		<0.01			<0.01	<0.01
11/21/2016		<0.01			<0.01	<0.01
1/17/2017		<0.01			<0.01	<0.01
3/20/2017		<0.01				
3/22/2017					<0.01	<0.01
4/18/2017		<0.01			<0.01	<0.01
5/30/2017		<0.01			<0.01	
5/31/2017						<0.01
2/13/2018		<0.01			<0.01	<0.01
5/22/2018					<0.01	<0.01
6/12/2018		<0.01			<0.01	<0.01
10/17/2018		<0.01			<0.01	<0.01
11/19/2018					<0.01	<0.01
3/5/2019	<0.01			<0.01		
4/10/2019		<0.01			<0.01	<0.01
5/14/2019					<0.01	<0.01
10/8/2019					<0.01	<0.01
10/14/2019	<0.01	<0.01				
10/16/2019				<0.01	<0.01	<0.01
2/3/2020	<0.01				<0.01	<0.01
2/4/2020		<0.01		<0.01		
2/5/2020			<0.01			
8/3/2020					<0.01	<0.01
8/4/2020				<0.01		
8/5/2020	<0.01	<0.01	<0.01			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	0.00373 (J)	<0.01				
6/20/2016		<0.01				
6/22/2016	0.00606 (J)					
8/9/2016	<0.01	<0.01				
8/24/2016	<0.01	<0.01				
10/3/2016		<0.01				
10/4/2016	<0.01					
10/26/2016	<0.01	<0.01				
11/21/2016	<0.01	<0.01				
1/18/2017	<0.01	<0.01				
3/22/2017	0.00945 (J)	<0.01				
4/18/2017	0.0105	<0.01				
5/31/2017	<0.01					
2/13/2018	<0.01	<0.01				
5/23/2018		<0.01				
5/24/2018	<0.01					
6/12/2018	<0.01	<0.01				
10/17/2018	<0.01	<0.01				
11/19/2018	<0.01	<0.01				
4/10/2019	<0.01	<0.01				
5/14/2019	<0.01	<0.01				
10/8/2019	<0.01					
10/10/2019		<0.01				
10/16/2019	<0.01	<0.01				
2/3/2020	<0.01	<0.01				
8/3/2020	<0.01			0.00315 (J)		
8/4/2020					<0.01	
8/5/2020		<0.01	<0.01			<0.01

	GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	GS-GSA-PZ-17
8/3/2020	<0.01	<0.01			
8/4/2020			<0.01	<0.01	0.00254 (J)

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				0.0303		0.151
10/3/2016				0.041		0.143
10/26/2016				0.0505		0.154
11/21/2016				0.0617		0.155
1/17/2017				0.0793		0.16
3/20/2017				0.0726		
3/21/2017						0.158
4/17/2017				0.294 (o)		0.159
5/30/2017				0.0832		0.159
2/13/2018				0.124		0.19
6/11/2018				0.138		0.166
10/17/2018				0.138		0.154
3/4/2019	0.0066					
3/5/2019					0.0059	
4/10/2019				0.151		0.241
10/14/2019				0.102	0.00845	0.213
10/16/2019	0.00598					
11/26/2019		0.435				
2/3/2020				0.0843	0.0135	
2/4/2020	0.00582	0.351	0.0442			0.217
8/4/2020	0.0061		0.111	0.0862	0.0133	
8/5/2020		0.436				0.235

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						0.0487
4/26/2016					0.0343	
6/20/2016					0.0413	0.0767
8/8/2016					0.0513	0.103
8/24/2016		0.0201			0.0471	0.093
10/3/2016		0.0167			0.0525	0.0964
10/26/2016		0.0253			0.0527	0.0904
11/21/2016		0.0233			0.0569	0.0857
1/17/2017		0.0708			0.0768	0.0745
3/20/2017		0.00277 (J)				
3/22/2017					0.0535	0.0328
4/18/2017		<0.005			0.0442	0.0242
5/30/2017		<0.005			0.0465	
5/31/2017						0.0441
2/13/2018		0.00492 (J)			0.062	0.0179
5/22/2018					0.0443	0.028
6/12/2018		<0.005			0.0512	0.0366
10/17/2018		<0.005			0.0751	0.0745
11/19/2018					0.0825	0.0225
3/5/2019	0.0836			0.14		
4/10/2019		<0.005			0.0445	0.0152
5/14/2019					0.0485	0.0222
10/8/2019					0.0778	0.0674
10/14/2019	0.12	<0.005				
10/16/2019				0.168	0.08	0.073
2/3/2020	0.108				0.0495	0.0193
2/4/2020		<0.005		0.159		
2/5/2020			<0.005			
8/3/2020					0.0722	0.0589
8/4/2020				0.178		
8/5/2020	0.141	<0.005	<0.005			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	0.232	<0.005				
6/20/2016		<0.005				
6/22/2016	0.332					
8/9/2016	0.311	<0.005				
8/24/2016	0.271	<0.005				
10/3/2016		<0.005				
10/4/2016	0.148					
10/26/2016	0.236	<0.005				
11/21/2016	0.241	<0.005				
1/18/2017	0.347	<0.005				
3/22/2017	0.271	<0.005				
4/18/2017	0.00324 (J)	<0.005				
5/31/2017	0.225					
2/13/2018	0.00661 (J)	<0.005				
5/23/2018		<0.005				
5/24/2018	0.158					
6/12/2018	0.291	<0.005				
10/17/2018	0.49	<0.005				
11/19/2018	0.386	<0.005				
4/10/2019	0.0144	<0.005				
5/14/2019	0.00536	<0.005				
10/8/2019	1.07					
10/10/2019		<0.005				
10/16/2019	0.848	<0.005				
2/3/2020	0.0114	<0.005				
8/3/2020	0.64			0.156		
8/4/2020					0.00412 (J)	
8/5/2020		<0.005	<0.005			0.237

Constituent: Cobalt (mg/L) Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17

8/3/2020 <0.005 0.00734

8/4/2020 <0.005 0.0021 (J) 0.471

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2020 4:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				0.389 (U)		0.741
10/3/2016				0.683		0.648
10/26/2016				0.242 (U)		0.632
11/21/2016				0.764		1.57
1/17/2017				0.191 (U)		0.493
3/20/2017				-0.0158 (U)		
3/21/2017						0.604 (U)
4/17/2017				0.307 (U)		0.252 (U)
5/30/2017				0.724		0.925
2/13/2018				0.633		0.382
6/11/2018				0.773		0.796
10/17/2018				0.668		0.922
3/4/2019	0.135 (U)					
3/5/2019					0.932	
4/10/2019				0.265 (U)		0.622
10/14/2019				0.297 (U)	0.184 (U)	0.317 (U)
10/16/2019	0.189 (U)					
2/3/2020				0.28 (U)	0.408 (U)	
2/4/2020	0.319 (U)	0.939	0.624			0.324 (U)
8/4/2020	0.0315 (U)		-0.402 (U)	0.45 (U)	-0.00668 (U)	
8/5/2020		-0.306 (U)				0.389 (U)

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2020 4:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
8/24/2016		0.558 (U)			0.566 (U)	0.65
10/3/2016		0.565			0.537 (U)	0.845
10/26/2016		0.555 (U)			0.636	0.994
11/21/2016		0.987			0.807	0.537 (U)
1/17/2017		0.476 (U)			0.308 (U)	-0.0159 (U)
3/20/2017		0.633 (U)				
3/22/2017					0.344 (U)	0.279 (U)
4/18/2017		0.248 (U)			0.934	0.32 (U)
5/30/2017		0.412 (U)			0.149 (U)	
5/31/2017						0.178 (U)
2/13/2018		1.08			0.774	0.804
5/22/2018					-0.091 (U)	0.0077 (U)
6/12/2018		0.446 (U)			1.18	-0.315 (U)
10/17/2018		1.05			0.553 (U)	0.574 (U)
11/19/2018					0.862 (D)	0.654 (D)
3/5/2019	0.364 (U)			0.852		
4/10/2019		0.128 (U)			0.342 (U)	0.329 (U)
10/8/2019					1.47	0.493 (U)
10/14/2019	0.369 (U)	0.225 (U)				
10/16/2019				1.29	0.204 (U)	0.046 (U)
2/3/2020	0.758				0.521 (U)	-0.0245 (U)
2/4/2020		0.336 (U)		0.441 (U)		
2/5/2020			0.576			
8/3/2020					-0.127 (U)	0.888 (U)
8/4/2020				-0.385 (U)		
8/5/2020	0.533 (U)	-0.115 (U)	1.85			

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2020 4:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H	
8/24/2016	0.131 (U)	0.266 (U)					
10/3/2016		0.59 (U)					
10/4/2016	0.514 (U)						
10/26/2016	0.755	0.164 (U)					
11/21/2016	0.7	0.296 (U)					
1/18/2017	0.606	0.0267 (U)					
3/22/2017	0.927	0.132 (U)					
4/18/2017	0.334 (U)	-0.0439 (U)					
5/31/2017	0.8	0.3 (U)					
2/13/2018	0.649	0.69					
5/23/2018		0.186 (U)					
5/24/2018	0.448 (U)						
6/12/2018	0.234 (U)	0.153 (U)					
10/17/2018	0.852	0.313 (U)					
11/19/2018	0.521 (D)	0.794					
4/10/2019	0.198 (U)	0.515					
5/14/2019		0.352 (U)					
10/8/2019	0.833 (U)						
10/10/2019		1.02 (U)					
10/16/2019	0.0279 (U)	0.356 (U)					
2/3/2020	0.0246 (U)	0.254 (U)					
8/3/2020	0.765 (U)			0.511 (U)			
8/4/2020					0.837 (U)		
8/5/2020		0.565 (U)	-0.284 (U)			0.758 (U)	

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2020 4:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

		GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	GS-GSA-PZ-17
8/3/2	020	0.652 (U)	0.0893 (U)			
8/4/20	020			0.839	0.114 (U)	0.407 (U)

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				0.264 (J)		0.793
10/3/2016				0.276 (J)		0.769
10/26/2016				0.182 (J)		0.578
11/21/2016				0.238 (J)		0.562
1/17/2017				0.34		0.571
3/20/2017				0.39		
3/21/2017						0.54
4/17/2017				0.57		0.54
5/30/2017				0.38		0.49
8/24/2017				0.54		0.7
2/13/2018				0.57 (D)		0.63 (D)
6/11/2018				0.63		0.39
10/17/2018				0.78		0.44
3/4/2019	0.101					
3/5/2019					0.249	
4/10/2019				0.738		<0.1
10/14/2019				0.619	0.37	<0.1
10/16/2019	0.0875 (J)					
11/26/2019		<0.1				
2/3/2020				0.427	0.438	
2/4/2020	0.0743 (J)	<0.1	0.115			<0.1
8/4/2020	0.109		0.113	0.389	0.349	
8/5/2020		<0.1				<0.1

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	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						0.149 (J)
4/26/2016					0.146 (J)	
6/20/2016					0.148 (J)	0.148 (J)
8/8/2016					0.137 (J)	0.134 (J)
8/24/2016		0.165 (J)			0.133 (J)	0.129 (J)
10/3/2016		0.114 (J)			0.103 (J)	0.086 (J)
10/26/2016		0.056 (J)			0.05 (J)	0.027 (J)
11/21/2016		0.059 (J)			0.047 (J)	0.027 (J)
1/17/2017		0.07 (J)			0.09 (J)	0.066 (J)
3/20/2017		0.18				
3/22/2017					0.12	0.13
4/18/2017		0.17			0.12	0.16
5/30/2017		0.16			0.13	
5/31/2017						0.13
8/23/2017					0.16	0.16
8/24/2017		0.18				
2/13/2018		0.15 (D)			0.14 (D)	0.22 (D)
5/22/2018					0.16	0.17
6/12/2018		0.15			0.16	0.16
10/17/2018		0.16			0.18	0.16
11/19/2018					0.15	0.18
3/5/2019	0.477			0.239		
4/10/2019		0.156			0.102	0.262
5/14/2019					0.119	0.17
10/8/2019					0.0924 (J)	0.164
10/14/2019	0.449	0.118				
10/16/2019				0.101	0.0756 (J)	0.114
2/3/2020	0.555				0.0982 (J)	0.182
2/4/2020		0.132		0.205		
2/5/2020			0.162			
8/3/2020					<0.1	0.122
8/4/2020				0.127		
8/5/2020	0.363	0.119	0.256			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	0.243 (J)	0.372				
6/20/2016		0.361				
6/22/2016	0.269 (J)					
8/9/2016	0.363	0.326				
8/24/2016	0.346	0.329				
10/3/2016		0.287 (J)				
10/4/2016	0.266 (J)					
10/26/2016	0.266 (J)	0.194 (J)				
11/21/2016	0.244 (J)	0.192 (J)				
1/18/2017	0.385	0.223 (J)				
3/22/2017	0.41	0.32				
4/18/2017	0.29	0.32				
5/31/2017	0.37					
8/23/2017	0.55	0.38				
2/13/2018	0.27 (D)	0.38 (D)				
5/23/2018		0.38				
5/24/2018	0.6					
6/12/2018	0.53	0.39				
10/17/2018	0.63	0.39				
11/19/2018	0.31	0.36				
4/10/2019	0.273	0.384				
5/14/2019	0.281	0.335				
10/8/2019	0.225					
10/10/2019		0.304				
10/16/2019	0.106	0.302				
2/3/2020	0.256	0.37				
8/3/2020	0.0766 (J)			<0.1		
8/4/2020	(-)				0.135	
8/5/2020		0.359	0.217		21.50	0.082 (J)
5.5/2020		0.000	J 17			0.002 (0)

Constituent: Fluoride (mg/L) Analysis Run 10/19/2020 4:18 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 8/3/2020 0.18 0.188 8/4/2020 0.167 <0.1

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.005		<0.005
10/3/2016				<0.005		<0.005
10/26/2016				<0.005		<0.005
11/21/2016				<0.005		<0.005
1/17/2017				<0.005		<0.005
3/20/2017				<0.005		
3/21/2017						<0.005
4/17/2017				<0.005		<0.005
5/30/2017				<0.005		<0.005
2/13/2018				<0.005		<0.005
6/11/2018				<0.005		<0.005
10/17/2018				<0.005		<0.005
3/4/2019	<0.005					
3/5/2019					<0.005	
4/10/2019				<0.005		<0.005
10/14/2019				<0.005	<0.005	<0.005
10/16/2019	<0.005					
11/26/2019		0.00271 (J)				
2/3/2020				<0.005	<0.005	
2/4/2020	<0.005	0.00334 (J)	<0.005			<0.005
8/4/2020	<0.005		<0.005	<0.005	<0.005	
8/5/2020		0.00329 (J)				<0.005

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.005
4/26/2016					<0.005	
6/20/2016					<0.005	<0.005
8/8/2016					<0.005	<0.005
8/24/2016		<0.005			<0.005	<0.005
10/3/2016		<0.005			<0.005	<0.005
10/26/2016		<0.005			<0.005	<0.005
11/21/2016		<0.005			<0.005	<0.005
1/17/2017		<0.005			<0.005	<0.005
3/20/2017		<0.005				
3/22/2017					<0.005	<0.005
4/18/2017		<0.005			<0.005	<0.005
5/30/2017		<0.005			<0.005	
5/31/2017						<0.005
2/13/2018		<0.005			<0.005	<0.005
5/22/2018					<0.005	<0.005
6/12/2018		<0.005			<0.005	<0.005
10/17/2018		<0.005			<0.005	<0.005
11/19/2018					<0.005	<0.005
3/5/2019	<0.005			<0.005		
4/10/2019		<0.005			<0.005	<0.005
5/14/2019					<0.005	<0.005
10/8/2019					<0.005	<0.005
10/14/2019	<0.005	<0.005				
10/16/2019				<0.005	<0.005	<0.005
2/3/2020	<0.005				<0.005	<0.005
2/4/2020		<0.005		<0.005		
2/5/2020			<0.005			
8/3/2020					<0.005	<0.005
8/4/2020				<0.005		
8/5/2020	<0.005	<0.005	<0.005			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	<0.005	<0.005				
6/20/2016		<0.005				
6/22/2016	<0.005					
8/9/2016	<0.005	<0.005				
8/24/2016	<0.005	<0.005				
10/3/2016		<0.005				
10/4/2016	<0.005					
10/26/2016	<0.005	<0.005				
11/21/2016	<0.005	<0.005				
1/18/2017	<0.005	<0.005				
3/22/2017	<0.005	<0.005				
4/18/2017	<0.005	<0.005				
5/31/2017	<0.005					
2/13/2018	<0.005	<0.005				
5/23/2018		<0.005				
5/24/2018	<0.005					
6/12/2018	<0.005	<0.005				
10/17/2018	0.00102 (J)	<0.005				
11/19/2018	0.00692	<0.005				
4/10/2019	<0.005	<0.005				
5/14/2019	<0.005	<0.005				
10/8/2019	<0.005					
10/10/2019		<0.005				
10/16/2019	0.00108 (J)	<0.005				
2/3/2020	<0.005	<0.005				
8/3/2020	0.002 (J)			0.00366 (J)		
8/4/2020					<0.005	
8/5/2020		<0.005	<0.005			0.00122 (J)

Constituent: Lead (mg/L) Analysis Run 10/19/2020 4:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 8/3/2020 <0.005 <0.005 <0.005 <0.005 0.00582

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				0.362		0.291
10/3/2016				0.371		0.287
10/26/2016				0.416		0.298
11/21/2016				0.401		0.294
1/17/2017				0.497		0.27
3/20/2017				0.533		
3/21/2017						0.258
4/17/2017				0.47		0.274
5/30/2017				0.479		0.285
2/13/2018				0.508		0.274
6/11/2018				0.425		0.266
10/17/2018				0.494		0.266
3/4/2019	<0.02					
3/5/2019					0.309	
4/10/2019				0.425		0.282
10/14/2019				0.459	0.38	0.262
10/16/2019	<0.02					
11/26/2019		0.449				
2/3/2020				0.474	0.46	
2/4/2020	<0.02	0.394	0.0506			0.29
8/4/2020	<0.02		0.0534	0.468	0.395	
8/5/2020		0.441				0.273

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	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						0.0353 (J)
4/26/2016					0.0264 (J)	
6/20/2016					0.0246 (J)	0.0583
8/8/2016					0.0229 (J)	0.0627
8/24/2016		0.0683			0.0236 (J)	0.0651
10/3/2016		0.0661			0.0229 (J)	0.0622
10/26/2016		0.0681			0.0227 (J)	0.0293 (J)
11/21/2016		0.0682			0.0236 (J)	0.0667
1/17/2017		0.0516			0.0228 (J)	0.0636
3/20/2017		0.135				
3/22/2017					0.0238 (J)	0.0464 (J)
4/18/2017		0.139			0.0242 (J)	0.0446 (J)
5/30/2017		0.141			0.0229 (J)	
5/31/2017						0.0496 (J)
2/13/2018		0.163			0.0233 (J)	0.0615
5/22/2018					0.0263 (J)	0.0465 (J)
6/12/2018		0.166			0.0251 (J)	0.0472 (J)
10/17/2018		0.188			0.025 (J)	0.0633
11/19/2018					0.0241	0.0584
3/5/2019	0.369			0.169		
4/10/2019		0.195			0.0285	0.0574
5/14/2019					0.026 (J)	0.0445
10/8/2019					0.0268	0.0677
10/14/2019	0.317	0.209				
10/16/2019				0.184	0.0263	0.0661
2/3/2020	0.332				0.0292	0.0534
2/4/2020		0.188		0.203		
2/5/2020			0.327			
8/3/2020					0.0259	0.0611
8/4/2020				0.166		
8/5/2020	0.322	0.206	0.275			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H	
4/25/2016	0.0964	0.0528					
6/20/2016		0.0554					
6/22/2016	0.156						
8/9/2016	0.122	0.0452 (J)					
8/24/2016	0.138	0.0488 (J)					
10/3/2016		0.0476 (J)					
10/4/2016	0.0966						
10/26/2016	0.134	0.049 (J)					
11/21/2016	0.167	0.0477 (J)					
1/18/2017	0.237	0.045 (J)					
3/22/2017	0.203	0.0493 (J)					
4/18/2017	0.0764	0.0494 (J)					
5/31/2017	0.218						
2/13/2018	0.0964	0.0446 (J)					
5/23/2018		0.0513					
5/24/2018	0.145						
6/12/2018	0.194	0.0511					
10/17/2018	0.384	0.0532					
11/19/2018	0.323	0.0467					
4/10/2019	0.0905	0.0504					
5/14/2019	0.0828	0.0485					
10/8/2019	0.419						
10/10/2019		0.054					
10/16/2019	0.337	0.052					
2/3/2020	0.0825	0.0556					
8/3/2020	0.27			0.422			
8/4/2020					0.364		
8/5/2020		0.0519	0.334			0.512	

Constituent: Lithium (mg/L) Analysis Run 10/19/2020 4:19 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17
8/3/2020 0.0753 0.102
8/4/2020 0.0558 1.39

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.0005		<0.0005
10/3/2016				<0.0005		<0.0005
10/26/2016				<0.0005		<0.0005
11/21/2016				<0.0005		<0.0005
1/17/2017				<0.0005		<0.0005
3/20/2017				<0.0005		
3/21/2017						<0.0005
4/17/2017				<0.0005		<0.0005
5/30/2017				<0.0005		<0.0005
2/13/2018				<0.0005		<0.0005
6/11/2018				<0.0005		<0.0005
10/17/2018				<0.0005		<0.0005
3/4/2019	<0.0005					
3/5/2019					<0.0005	
4/10/2019				<0.0005		<0.0005
10/14/2019				<0.0005	<0.0005	<0.0005
10/16/2019	<0.0005					
11/26/2019		<0.0005				
2/3/2020				<0.0005	<0.0005	
2/4/2020	<0.0005	<0.0005	<0.0005			<0.0005
8/4/2020	<0.0005		<0.0005	<0.0005	<0.0005	
8/5/2020		<0.0005				<0.0005

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.0005
4/26/2016					<0.0005	
6/20/2016					<0.0005	<0.0005
8/8/2016					<0.0005	<0.0005
8/24/2016		<0.0005			<0.0005	<0.0005
10/3/2016		<0.0005			<0.0005	<0.0005
10/26/2016		<0.0005			<0.0005	<0.0005
11/21/2016		<0.0005			<0.0005	<0.0005
1/17/2017		<0.0005			<0.0005	<0.0005
3/20/2017		<0.0005				
3/22/2017					<0.0005	<0.0005
4/18/2017		<0.0005			<0.0005	<0.0005
5/30/2017		<0.0005			<0.0005	
5/31/2017						<0.0005
2/13/2018		<0.0005			<0.0005	<0.0005
5/22/2018					<0.0005	<0.0005
6/12/2018		<0.0005			<0.0005	<0.0005
10/17/2018		<0.0005			<0.0005	<0.0005
11/19/2018					<0.0005	<0.0005
3/5/2019	<0.0005			<0.0005		
4/10/2019		<0.0005			<0.0005	<0.0005
5/14/2019					<0.0005	<0.0005
10/8/2019					<0.0005	<0.0005
10/14/2019	<0.0005	<0.0005				
10/16/2019				<0.0005	<0.0005	<0.0005
2/3/2020	<0.0005				<0.0005	<0.0005
2/4/2020		<0.0005		<0.0005		
2/5/2020			<0.0005			
8/3/2020					<0.0005	<0.0005
8/4/2020				<0.0005		
8/5/2020	<0.0005	<0.0005	<0.0005			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	<0.0005	<0.0005				
6/20/2016		<0.0005				
6/22/2016	<0.0005					
8/9/2016	<0.0005	<0.0005				
8/24/2016	<0.0005	<0.0005				
10/3/2016		<0.0005				
10/4/2016	<0.0005					
10/26/2016	<0.0005	<0.0005				
11/21/2016	<0.0005	<0.0005				
1/18/2017	<0.0005	<0.0005				
3/22/2017	<0.0005	<0.0005				
4/18/2017	<0.0005	<0.0005				
5/31/2017	<0.0005					
2/13/2018	<0.0005	<0.0005				
5/23/2018		<0.0005				
5/24/2018	<0.0005					
6/12/2018	<0.0005	<0.0005				
10/17/2018	<0.0005	<0.0005				
11/19/2018	<0.0005	<0.0005				
4/10/2019	<0.0005	<0.0005				
5/14/2019	<0.0005	<0.0005				
10/8/2019	<0.0005					
10/10/2019		<0.0005				
10/16/2019	<0.0005	<0.0005				
2/3/2020	<0.0005	<0.0005				
8/3/2020	<0.0005			<0.0005		
8/4/2020					<0.0005	
8/5/2020		<0.0005	<0.0005			<0.0005

Constituent: Mercury (mg/L) Analysis Run 10/19/2020 4:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 <0.0005 <0.0005

8/4/2020 <0.0005 <0.0005 <0.0005

8/3/2020

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2020 4:19 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.01		<0.01
10/3/2016				<0.01		<0.01
10/26/2016				<0.01		<0.01
11/21/2016				<0.01		<0.01
1/17/2017				<0.01		<0.01
3/20/2017				<0.01		
3/21/2017						<0.01
4/17/2017				<0.01		<0.01
5/30/2017				<0.01		<0.01
2/13/2018				<0.01		<0.01
6/11/2018				<0.01		<0.01
10/17/2018				<0.01		<0.01
3/4/2019	<0.01					
3/5/2019					0.00347 (J)	
4/10/2019				<0.01		<0.01
10/14/2019				<0.01	<0.01	<0.01
10/16/2019	<0.01					
11/26/2019		<0.01				
2/3/2020				<0.01	<0.01	
2/4/2020	<0.01	<0.01	<0.01			<0.01
8/4/2020	<0.01		<0.01	<0.01	<0.01	
8/5/2020		<0.01				<0.01

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.01
4/26/2016					<0.01	
6/20/2016					<0.01	<0.01
8/8/2016					<0.01	<0.01
8/24/2016		0.0031 (J)			<0.01	<0.01
10/3/2016		<0.01			<0.01	<0.01
10/26/2016		<0.01			<0.01	<0.01
11/21/2016		<0.01			<0.01	<0.01
1/17/2017		<0.01			<0.01	<0.01
3/20/2017		<0.01				
3/22/2017					<0.01	<0.01
4/18/2017		<0.01			<0.01	<0.01
5/30/2017		<0.01			<0.01	
5/31/2017						<0.01
2/13/2018		<0.01			<0.01	<0.01
5/22/2018					<0.01	<0.01
6/12/2018		<0.01			<0.01	<0.01
10/17/2018		<0.01			<0.01	<0.01
11/19/2018					<0.01	<0.01
3/5/2019	<0.01			<0.01		
4/10/2019		<0.01			<0.01	<0.01
5/14/2019					<0.01	<0.01
10/8/2019					<0.01	<0.01
10/14/2019	<0.01	<0.01				
10/16/2019				<0.01	<0.01	<0.01
2/3/2020	<0.01				<0.01	<0.01
2/4/2020		<0.01		<0.01		
2/5/2020			<0.01			
8/3/2020					<0.01	<0.01
8/4/2020				<0.01		
8/5/2020	<0.01	<0.01	<0.01			
	<0.01	<0.01	<0.01	<0.01		

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	<0.01	<0.01				
6/20/2016		<0.01				
6/22/2016	<0.01					
8/9/2016	<0.01	<0.01				
8/24/2016	<0.01	<0.01				
10/3/2016		<0.01				
10/4/2016	<0.01					
10/26/2016	<0.01	<0.01				
11/21/2016	<0.01	<0.01				
1/18/2017	<0.01	<0.01				
3/22/2017	<0.01	<0.01				
4/18/2017	<0.01	<0.01				
5/31/2017	<0.01					
2/13/2018	<0.01	<0.01				
5/23/2018		<0.01				
5/24/2018	<0.01					
6/12/2018	<0.01	<0.01				
10/17/2018	<0.01	<0.01				
11/19/2018	<0.01	<0.01				
4/10/2019	<0.01	<0.01				
5/14/2019	<0.01	<0.01				
10/8/2019	<0.01					
10/10/2019		<0.01				
10/16/2019	<0.01	<0.01				
2/3/2020	<0.01	<0.01				
8/3/2020	<0.01			<0.01		
8/4/2020					0.00423 (J)	
8/5/2020		<0.01	0.00247 (J)			<0.01

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2020 4:19 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 8/3/2020 <0.01 <0.01

8/4/2020 0.00347 (J) 0.00267 (J) <0.01

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				6.28		3.83 (E)
10/3/2016				6.28		3.82 (E)
10/26/2016				6.19		3.81 (E)
11/21/2016				6.2		3.81
1/17/2017				6.13		3.78
3/20/2017				6.17		
3/21/2017						3.76
4/17/2017				5.6		3.76
5/30/2017				6.07		3.76
8/24/2017				5.99		3.7
2/13/2018				5.88		3.73
6/11/2018				5.91		3.8
10/17/2018				5.88		3.81
3/4/2019	6.04					
3/5/2019					6.7	
4/10/2019				5.83		3.83
10/14/2019				6.04	6.39	3.91
10/16/2019	6.07					
2/3/2020				5.98	5.88	
2/4/2020	6.02	4.57	6			3.83
8/4/2020	5.74		5.89	6.09	5.9	
8/5/2020		4.13				3.86

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	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						5.94
4/26/2016					5.2	
6/20/2016					5.18	5.96
8/8/2016					5.12	5.88
8/24/2016		6.78				
10/3/2016		6.71			5.21 (D)	5.91 (D)
10/26/2016		6.65			5.2	5.84
11/21/2016		6.7			5.19 (D)	5.82 (D)
1/17/2017		6.25			5.17 (D)	5.87 (D)
3/20/2017		7.04				
3/22/2017					5.2 (D)	6.01 (D)
4/18/2017		6.99			5.2	6.02
5/30/2017		6.98			5.14 (D)	
5/31/2017						5.85 (D)
8/23/2017					5.12 (D)	5.89 (D)
8/24/2017		6.89				
2/13/2018		6.85			5.18	6.21
5/22/2018					5.2	6.04
6/12/2018		6.83			5.15	5.95
10/17/2018		6.81			5.12	5.9
11/19/2018					5.09 (D)	6.03 (D)
3/5/2019	6.19			5.88		
4/10/2019		6.71			5.11	6.1
5/14/2019					5.19	6.07
10/8/2019					5.12	5.96
10/14/2019	5.89	6.88				
10/16/2019				5.43	5.16	5.98
2/3/2020	5.84				5	5.95
2/4/2020		6.85		5.34		
2/5/2020			7.48			
8/3/2020					5.08	5.95
8/4/2020				5.33		
8/5/2020	5.81	6.76	7.58			

		MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/2	25/2016	5.56	6.22				
6/2	20/2016		6.21				
6/2	22/2016	5.57					
8/9	9/2016	5.67	6.11				
8/2	24/2016	5.63	6.11				
10	/3/2016		6.13 (D)				
10	/4/2016	5.69 (D)					
10	/26/2016	5.56	6.12				
11	/21/2016	5.42 (D)	6.09 (D)				
1/1	18/2017	5.11 (D)	6.09 (D)				
3/2	22/2017	4.52 (D)	6.15 (D)				
4/1	18/2017	5.84	6.19				
	31/2017	4.56 (D)					
	23/2017	4.77 (D)	6.12				
	13/2018	5.67	6.22				
	23/2018		6.21				
	24/2018	5.19					
	12/2018	4.79	6.16				
	/17/2018	4.75	6.12				
	/19/2018	3.77 (D)	6.16 (D)				
	10/2019	5.54	6.14				
	14/2019	5.71	6.23				
	/8/2019	4.98	0.23				
	/10/2019	4.50	6.15				
	/16/2019	4.51	6.19				
		4.51					
	3/2020	5.54	6.14		4.00		
	3/2020	5.06			4.09	0.00	
	1/2020					6.88	
8/5	5/2020		6.15	6.15			3.83

	GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	GS-GSA-PZ-17
8/3/2020	6.32	6.03			
8/4/2020			6.04	6.42	4.08

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.01		0.00234 (J)
10/3/2016				<0.01		0.00739 (J)
10/26/2016				<0.01		0.00266 (J)
11/21/2016				<0.01		0.00212 (J)
1/17/2017				<0.01		0.00263 (J)
3/20/2017				<0.01		
3/21/2017						0.00588 (J)
4/17/2017				0.00521 (J)		0.00579 (J)
5/30/2017				<0.01		0.00471 (J)
2/13/2018				0.00267 (J)		0.00498 (J)
6/11/2018				0.00236 (J)		0.00388 (J)
10/17/2018				<0.01		<0.01
3/4/2019	<0.01					
3/5/2019					<0.01	
4/10/2019				0.00234 (J)		0.00322 (J)
10/14/2019				<0.01	<0.01	<0.01
10/16/2019	<0.01					
11/26/2019		0.00614 (J)				
2/3/2020				<0.01	<0.01	
2/4/2020	<0.01	<0.01	<0.01			<0.01
8/4/2020	<0.01		<0.01	<0.01	<0.01	
8/5/2020		0.00417 (J)				0.00298 (J)

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.01
4/26/2016					0.00261 (J)	
6/20/2016					0.00242 (J)	<0.01
8/8/2016					0.00253 (J)	<0.01
8/24/2016		<0.01			<0.01	<0.01
10/3/2016		<0.01			0.00211 (J)	<0.01
10/26/2016		<0.01			<0.01	<0.01
11/21/2016		<0.01			<0.01	<0.01
1/17/2017		<0.01			<0.01	<0.01
3/20/2017		<0.01				
3/22/2017					0.0022 (J)	<0.01
4/18/2017		<0.01			0.0027 (J)	<0.01
5/30/2017		<0.01			0.00316 (J)	
5/31/2017						<0.01
2/13/2018		<0.01			0.00211 (J)	<0.01
5/22/2018					0.00372 (J)	<0.01
6/12/2018		<0.01			0.00409 (J)	<0.01
10/17/2018		<0.01			<0.01	<0.01
11/19/2018					<0.01	<0.01
3/5/2019	<0.01			<0.01		
4/10/2019		<0.01			0.00471 (J)	0.00322 (J)
5/14/2019					0.00316 (J)	<0.01
10/8/2019					<0.01	<0.01
10/14/2019	<0.01	<0.01				
10/16/2019				<0.01	<0.01	<0.01
2/3/2020	<0.01				0.00272 (J)	<0.01
2/4/2020		<0.01		<0.01		
2/5/2020			<0.01			
8/3/2020					0.00278 (J)	<0.01
8/4/2020				<0.01		
8/5/2020	<0.01	<0.01	<0.01			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	<0.01	<0.01				
6/20/2016		<0.01				
6/22/2016	<0.01					
8/9/2016	<0.01	<0.01				
8/24/2016	<0.01	<0.01				
10/3/2016		<0.01				
10/4/2016	<0.01					
10/26/2016	<0.01	<0.01				
11/21/2016	<0.01	<0.01				
1/18/2017	<0.01	<0.01				
3/22/2017	0.0141	<0.01				
4/18/2017	0.0158	<0.01				
5/31/2017	0.00632 (J)					
2/13/2018	0.0209 (o)	0.00403 (J)				
5/23/2018		<0.01				
5/24/2018	0.00918 (J)					
6/12/2018	0.00836 (J)	<0.01				
10/17/2018	<0.01	<0.01				
11/19/2018	0.00439 (J)	0.00436 (J)				
4/10/2019	0.0113	<0.01				
5/14/2019	0.0119	0.00201 (J)				
10/8/2019	0.00256 (J)					
10/10/2019		<0.01				
10/16/2019	0.00286 (J)	<0.01				
2/3/2020	0.012	0.00212 (J)				
8/3/2020	0.0146			0.00616 (J)		
8/4/2020					<0.01	
8/5/2020		0.00232 (J)	<0.01			0.00571 (J)

Constituent: Selenium (mg/L) Analysis Run 10/19/2020 4:19 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 8/3/2020 <0.01 <0.01 <0.01 0.0135

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				2910		567
10/3/2016				2980		596
10/26/2016				2790		585
11/21/2016				2880		593
1/17/2017				2950		637
3/20/2017				2800		
3/21/2017						530
4/17/2017				2400		530
5/30/2017				2900		530
8/24/2017				2900		530
6/11/2018				2900		540
10/17/2018				2800		520
3/4/2019	785					
3/5/2019					1170	
4/10/2019				2980		616
10/14/2019				3110	1710	641
10/16/2019	750					
11/26/2019		997				
2/3/2020				2840	1970	
2/4/2020	725	978	720			571
8/4/2020	694		773	2820	1860	
8/5/2020		811				519

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						745
4/26/2016					1490	
6/20/2016					1420	964
8/8/2016					1460	1100
8/24/2016		1250			1450	1130
10/3/2016		1270			1460	1140
10/26/2016		1240			1330	1060
11/21/2016		1210			1420	1100
1/17/2017		1150			1350	1160
3/20/2017		1400				
3/22/2017					1500	900
4/18/2017		1300			1300	870
5/30/2017		1500			1400	
5/31/2017						1100
8/23/2017					1500	920
8/24/2017		1800				
5/22/2018					2100	1200
6/12/2018		1800			1500	860
10/17/2018		1600			1400	970
11/19/2018					1300	1000
3/5/2019	871			2010		
4/10/2019		2150			1700	889
5/14/2019					1560	948
10/8/2019					1540	1230
10/14/2019	818	2090				
10/16/2019				2020	1680	1170
2/3/2020	808				1510	803
2/4/2020		1570		1710		
2/5/2020			223			
8/3/2020					1370	907
8/4/2020				1790		
8/5/2020	761	1880	243			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	1890	2260				
6/20/2016		2500				
6/22/2016	2100					
8/9/2016	2050	2750				
8/24/2016	2190	2770				
10/3/2016		3060				
10/4/2016	1950					
10/26/2016	1980	2650				
11/21/2016	2060	2720				
1/18/2017	2620	2650				
3/22/2017	3200	2700				
4/18/2017	2500	2400				
5/31/2017	2800					
8/23/2017	2600	2700				
5/23/2018		2400				
5/24/2018	2700					
6/12/2018	2500	2600				
10/17/2018	2700	2600				
11/19/2018	3000	2400				
4/10/2019	2460	2090				
5/14/2019	2460	2240				
10/8/2019	2950					
10/10/2019		2690				
10/16/2019	2820	3050				
2/3/2020	2290	1920				
8/3/2020	2330			729		
8/4/2020					1700	
8/5/2020		1930	1830			796

	GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	GS-GSA-PZ-17
8/3/2020	210	379			
8/4/2020			23.8	340	1310

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				<0.001		<0.001
10/3/2016				<0.001		<0.001
10/26/2016				<0.001		<0.001
11/21/2016				<0.001		<0.001
1/17/2017				<0.001		<0.001
3/20/2017				<0.001		
3/21/2017						<0.001
4/17/2017				<0.001		<0.001
5/30/2017				<0.001		<0.001
2/13/2018				<0.001		<0.001
6/11/2018				<0.001		<0.001
10/17/2018				<0.001		<0.001
3/4/2019	<0.001					
3/5/2019					<0.001	
4/10/2019				<0.001		<0.001
10/14/2019				<0.001	<0.001	<0.001
10/16/2019	<0.001					
11/26/2019		0.000375 (J)				
2/3/2020				<0.001	<0.001	
2/4/2020	<0.001	0.000491 (J)	<0.001			<0.001
8/4/2020	<0.001		<0.001	<0.001	<0.001	
8/5/2020		0.000297 (J)				0.000205 (J)

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						<0.001
4/26/2016					<0.001	
6/20/2016					<0.001	<0.001
8/8/2016					<0.001	<0.001
8/24/2016		<0.001			<0.001	<0.001
10/3/2016		<0.001			<0.001	<0.001
10/26/2016		<0.001			<0.001	<0.001
11/21/2016		<0.001			<0.001	<0.001
1/17/2017		<0.001			<0.001	<0.001
3/20/2017		<0.001				
3/22/2017					<0.001	<0.001
4/18/2017		<0.001			<0.001	<0.001
5/30/2017		<0.001			<0.001	
5/31/2017						<0.001
2/13/2018		<0.001			<0.001	<0.001
5/22/2018					<0.001	<0.001
6/12/2018		<0.001			<0.001	<0.001
10/17/2018		<0.001			<0.001	<0.001
11/19/2018					<0.001	<0.001
3/5/2019	<0.001			0.00021 (J)		
4/10/2019		<0.001			<0.001	<0.001
5/14/2019					<0.001	<0.001
10/8/2019					<0.001	<0.001
10/14/2019	<0.001	<0.001				
10/16/2019				0.000262 (J)	<0.001	<0.001
2/3/2020	<0.001				<0.001	<0.001
2/4/2020		<0.001		0.000233 (J)		
2/5/2020			<0.001			
8/3/2020					<0.001	<0.001
8/4/2020				0.000265 (J)		
8/5/2020	<0.001	<0.001	<0.001			

	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H	
4/25/2016	0.000205 (J)	<0.001					
6/20/2016		<0.001					
6/22/2016	<0.001						
8/9/2016	<0.001	<0.001					
8/24/2016	<0.001	<0.001					
10/3/2016		<0.001					
10/4/2016	<0.001						
10/26/2016	0.000209 (J)	<0.001					
11/21/2016	<0.001	<0.001					
1/18/2017	<0.001	<0.001					
3/22/2017	<0.001	<0.001					
4/18/2017	<0.001	<0.001					
5/31/2017	<0.001						
2/13/2018	<0.001	<0.001					
5/23/2018		<0.001					
5/24/2018	<0.001						
6/12/2018	<0.001	<0.001					
10/17/2018	<0.001	<0.001					
11/19/2018	0.000226 (J)	<0.001					
4/10/2019	<0.001	<0.001					
5/14/2019	<0.001	<0.001					
10/8/2019	<0.001						
10/10/2019		<0.001					
10/16/2019	<0.001	<0.001					
2/3/2020	<0.001	<0.001					
8/3/2020	<0.001			<0.001			
8/4/2020					<0.001		
8/5/2020		<0.001	<0.001			<0.001	

Constituent: Thallium (mg/L) Analysis Run 10/19/2020 4:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

GS-GSA-PZ-19 GS-GSA-PZ-20 GS-GSA-PZ-21 GS-GSA-PZ-22 GS-GSA-PZ-17 8/3/2020 <0.001 <0.001 <0.001 <0.001 0.000242 (J)

Constituent: Total dissolved solids (mg/L) Analysis Run 10/19/2020 4:19 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4
8/24/2016				5020		992
10/3/2016				4880		988
10/26/2016				5020		1030
11/21/2016				5090		1020
1/17/2017				4330		988
3/20/2017				2690		
3/21/2017						990
4/17/2017				4780		884
5/30/2017				5170		1060
8/24/2017				5140		1060
6/11/2018				4960		944
10/17/2018				4910		928
3/4/2019	1150					
3/5/2019					2170	
4/10/2019				5090		1000
10/14/2019				5110	3200	967
10/16/2019	1150					
11/26/2019		1580				
2/3/2020				4920	3660	
2/4/2020	1200	1580	1200			978
8/4/2020	1230		1350	5110	3530	
8/5/2020		1380				938

Constituent: Total dissolved solids (mg/L) Analysis Run 10/19/2020 4:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)
4/25/2016						1260
4/26/2016					2080	
6/20/2016					2060	1620
8/8/2016					2070	1740
8/24/2016		2280			2040	1720
10/3/2016		2370			2110	1800
10/26/2016		2350			2000	1800
11/21/2016		2530			2070	1740
1/17/2017		2380			1930	1960
3/20/2017		2630				
3/22/2017					2060	1510
4/18/2017		2700			2140	1580
5/30/2017		2980			2240	
5/31/2017						1730
8/23/2017					2160	1550
8/24/2017		3390				
5/22/2018					2380	1500
6/12/2018		3510			2400	1550
10/17/2018		3550			2220	1740
11/19/2018					2360	1990
3/5/2019	1410			3240		
4/10/2019		3580			2630	1250
5/14/2019					2340 (D)	1480
10/8/2019					2330	1840
10/14/2019	1340	3730				
10/16/2019				3080	3650	1830
2/3/2020	1290				2380	1440
2/4/2020		3190		3110		
2/5/2020			1100			
8/3/2020					2200	1650
8/4/2020				2920		
8/5/2020	1330	3610	1100			

Constituent: Total dissolved solids (mg/L) Analysis Run 10/19/2020 4:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

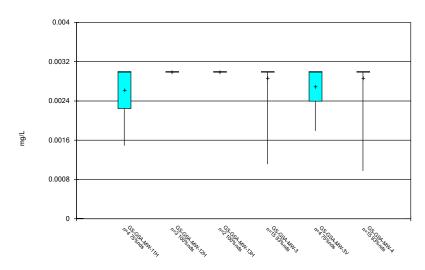
	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-PZ-18	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016	2720	3300				
6/20/2016		3870				
6/22/2016	3250					
8/9/2016	3050	4140				
8/24/2016	3080	4190				
10/3/2016		4190				
10/4/2016	2900					
10/26/2016	2940	4400				
11/21/2016	3090	4230				
1/18/2017	4020	4120				
3/22/2017	4180	3980				
4/18/2017	4440	3880				
5/31/2017	3970					
8/23/2017	4050	3990				
5/23/2018		3740				
5/24/2018	3680					
6/12/2018	3820	4080				
10/17/2018	4730	4250				
11/19/2018	4710	3920				
4/10/2019	3680	3280				
5/14/2019	3580 (D)	3130 (D)				
10/8/2019	4720	(-/				
10/10/2019	•	4000				
10/16/2019	4210	4060				
2/3/2020	3530	3240				
8/3/2020	3760	3270		1210		
8/4/2020	3700			1210	3080	
		2200	2220		3000	1290
8/5/2020		3200	3330			1280

Constituent: Total dissolved solids (mg/L) Analysis Run 10/19/2020 4:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	GS-GSA-PZ-17
8/3/2020	740	798			
8/4/2020			447	638	2160

FIGURE B.

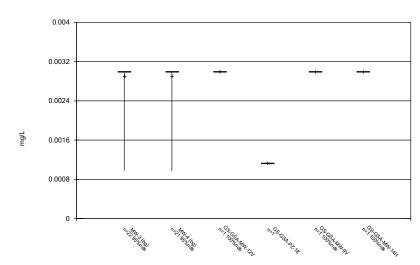
Box & Whiskers Plot



Constituent: Antimony Analysis Run 10/19/2020 4:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

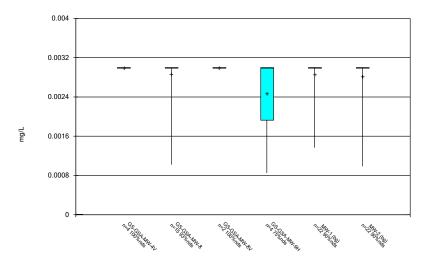
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Antimony Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

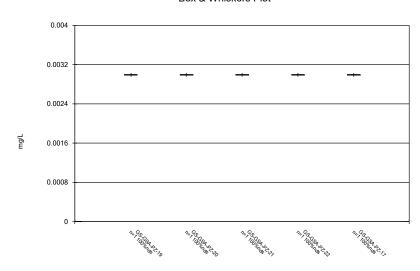
Box & Whiskers Plot



Constituent: Antimony Analysis Run 10/19/2020 4:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

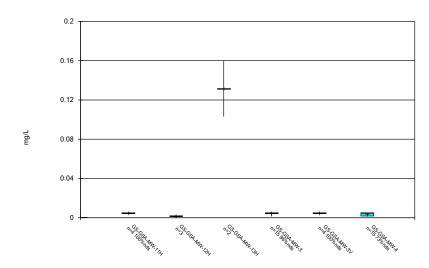
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



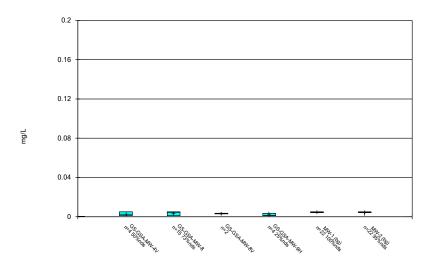
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

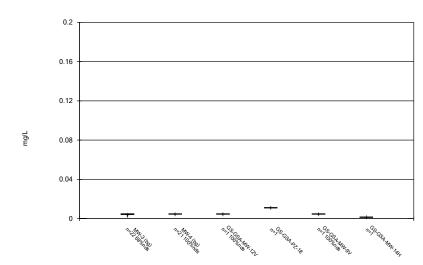
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

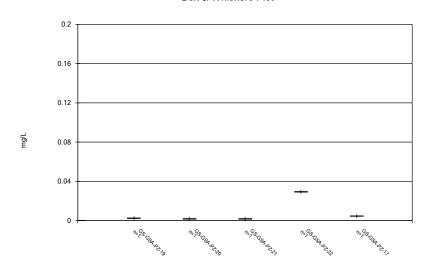
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

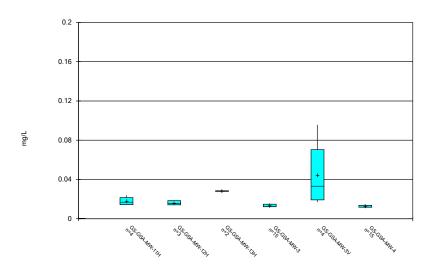
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

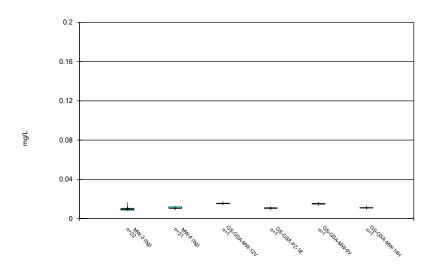
Box & Whiskers Plot



Constituent: Barium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

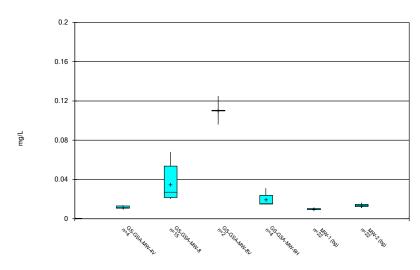
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Barium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

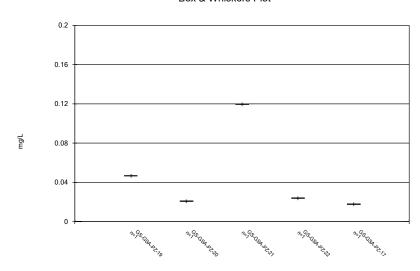
Box & Whiskers Plot



Constituent: Barium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

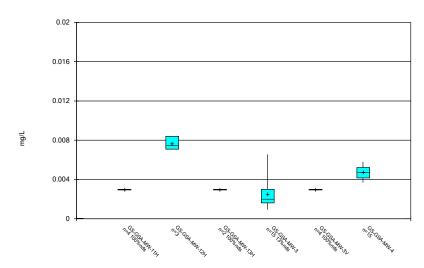
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Barium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

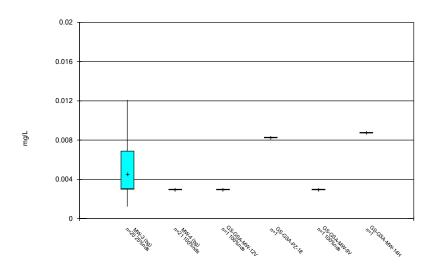
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

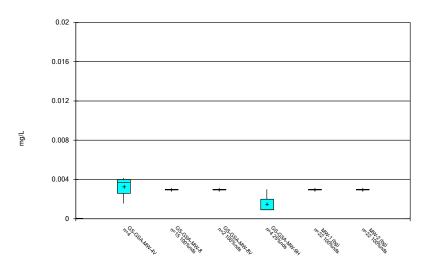
Sanitas[™] v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

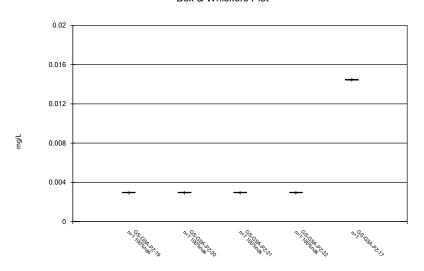
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

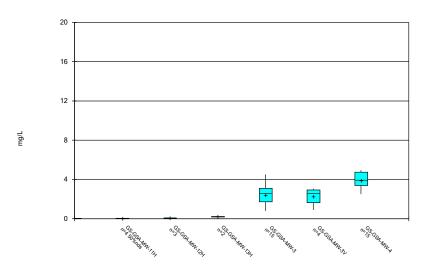
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



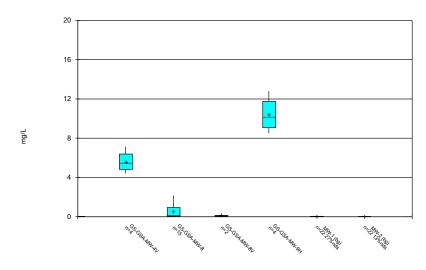
Constituent: Beryllium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

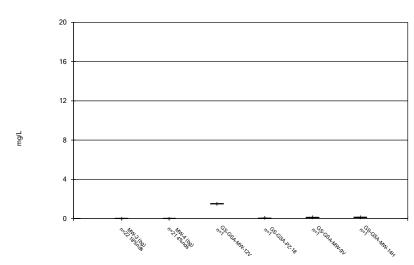
Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

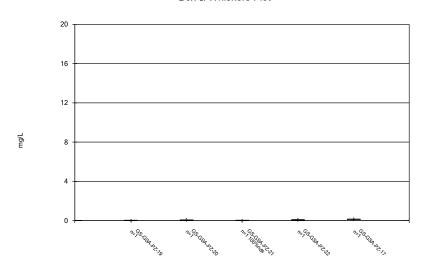
Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

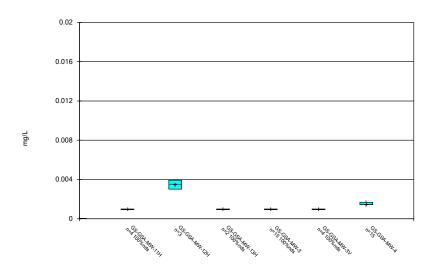
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

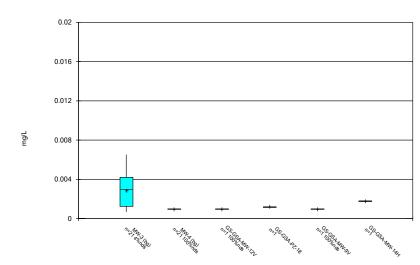
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

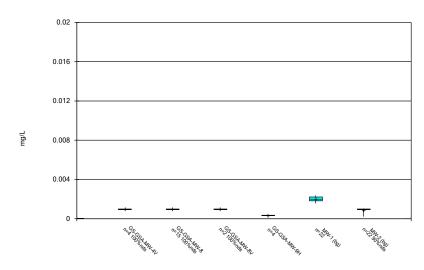
Sanitas[™] v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

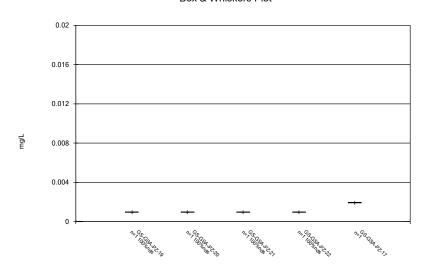
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

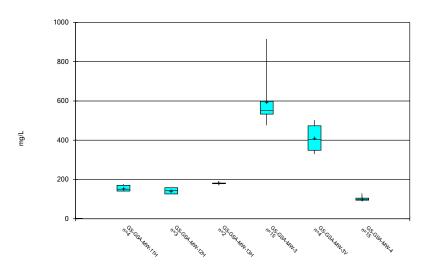
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

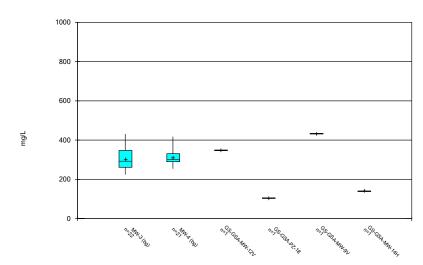
Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

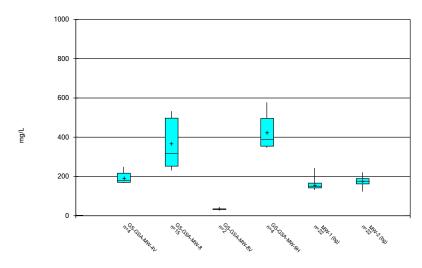
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

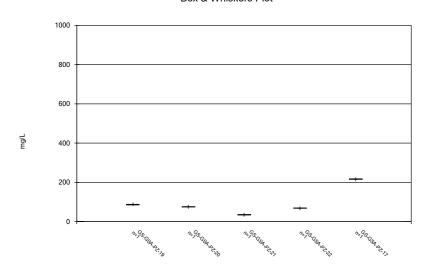
Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

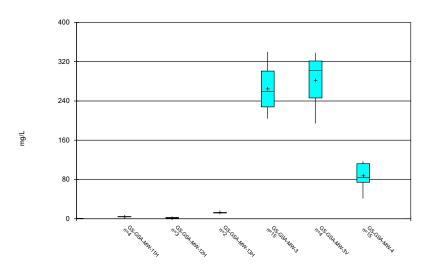
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

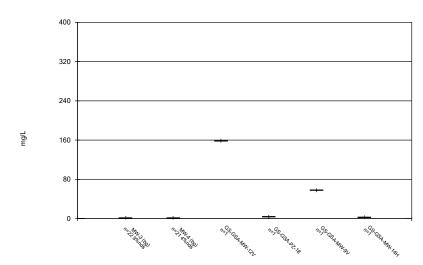
Box & Whiskers Plot



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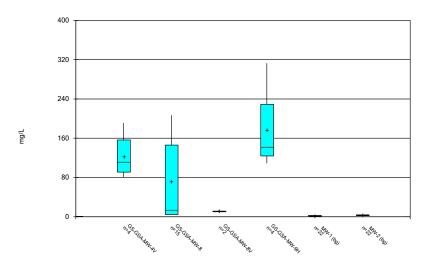
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Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

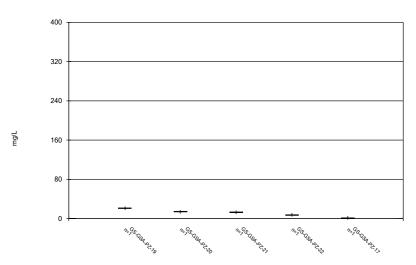
Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

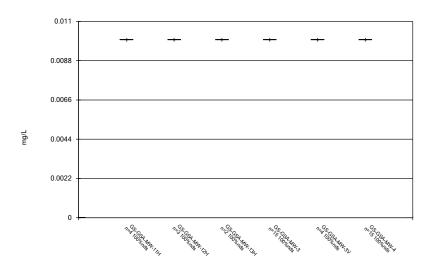
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Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2020 4:20 PM
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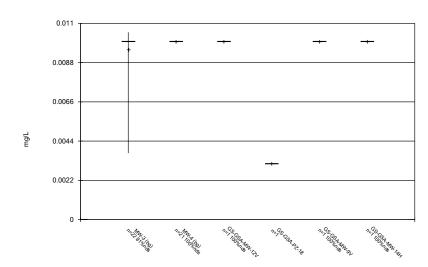
Box & Whiskers Plot



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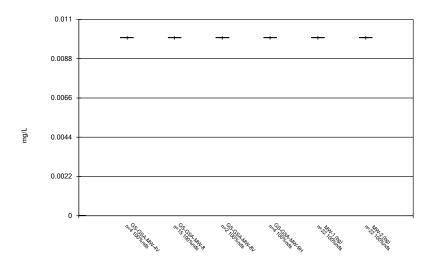
Sanitas[™] v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

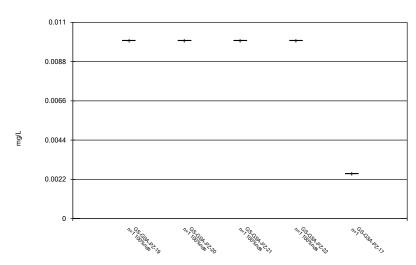
Box & Whiskers Plot



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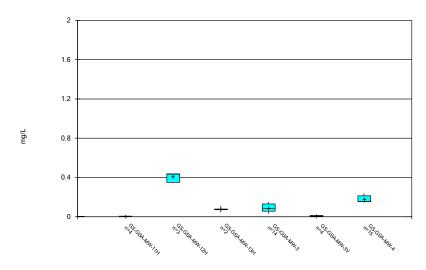
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



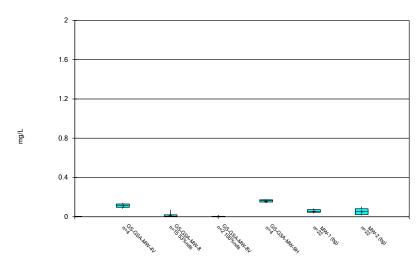
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

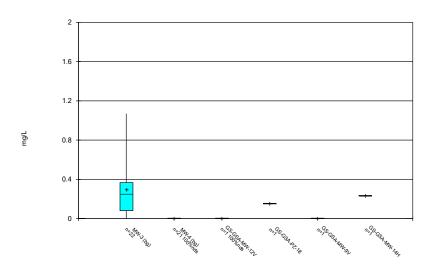
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

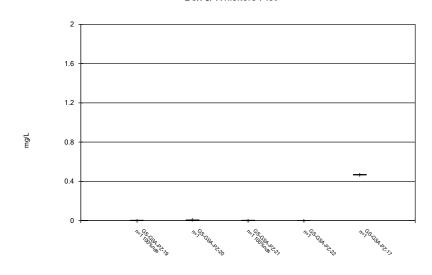
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

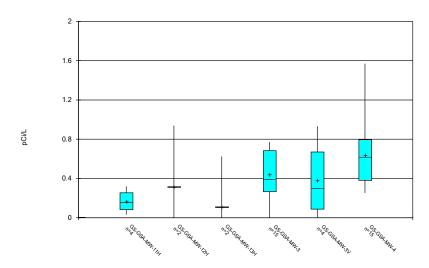
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

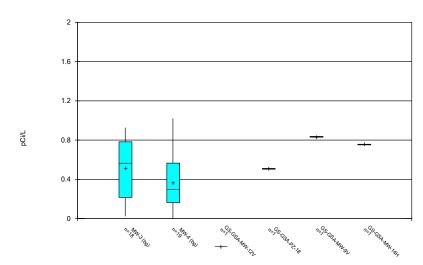
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

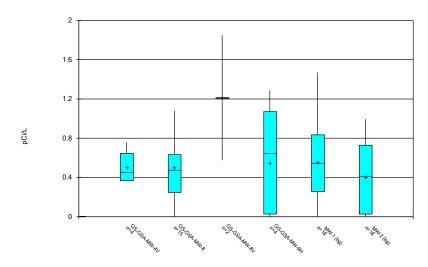
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

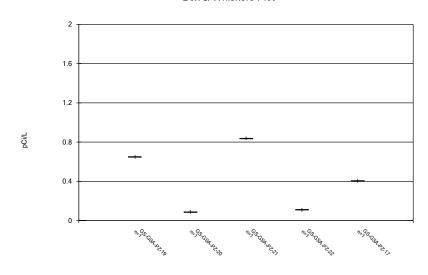
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

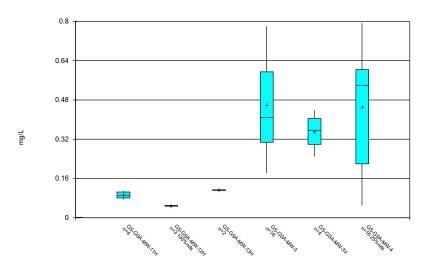
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Box & Whiskers Plot



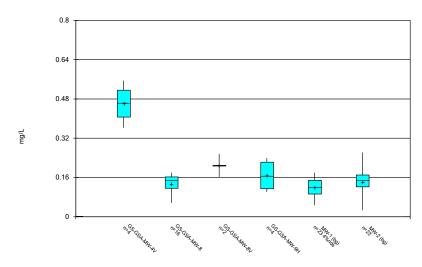
Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

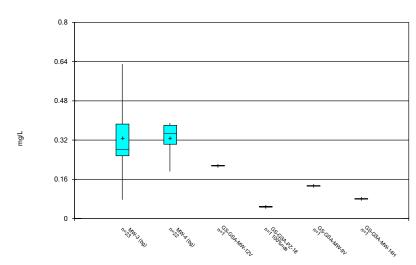
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

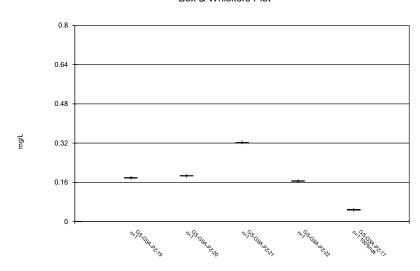
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

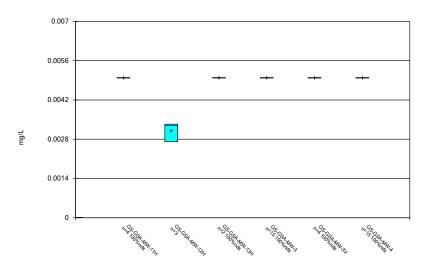
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

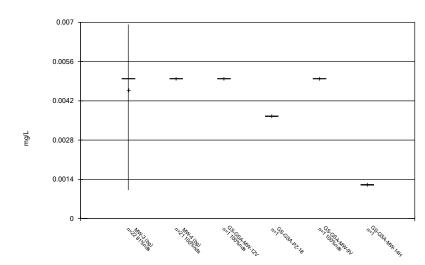
Box & Whiskers Plot



Constituent: Lead Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

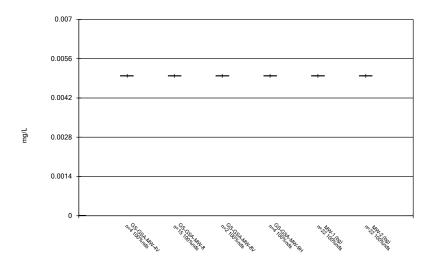
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lead Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

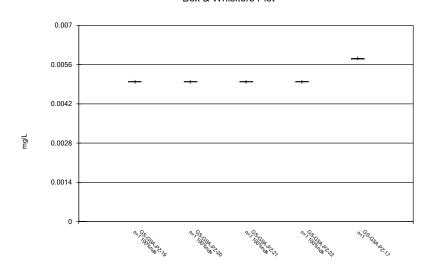
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

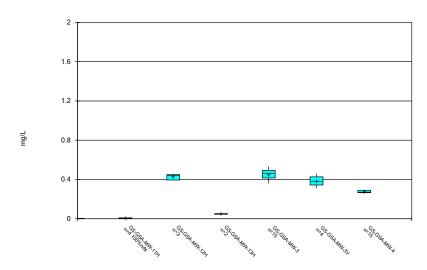
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Box & Whiskers Plot



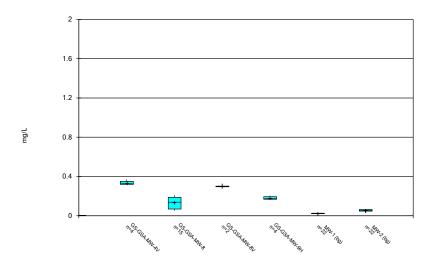
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Lithium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

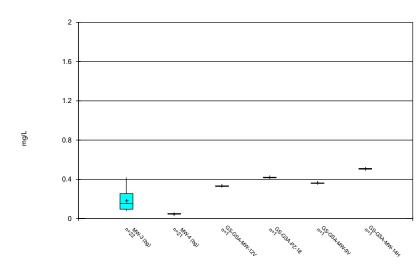
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

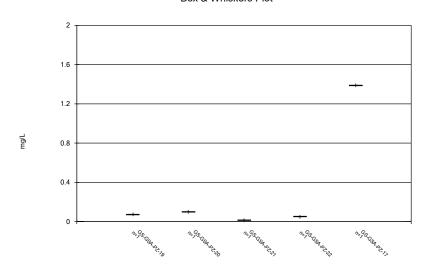
Box & Whiskers Plot



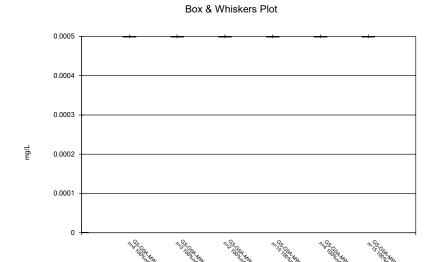
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

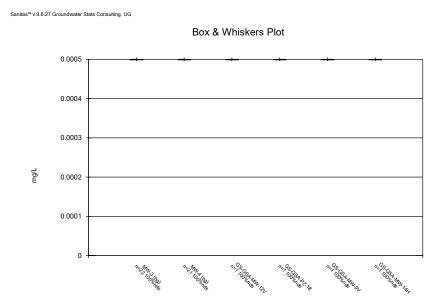
Box & Whiskers Plot



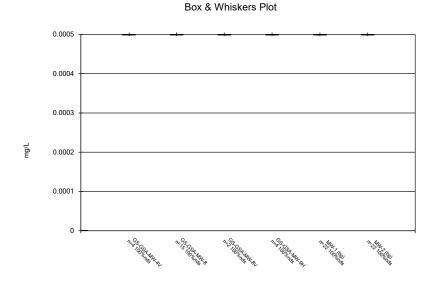
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Plant Gorgas Client: Southern Company Data: Gorgas GSA



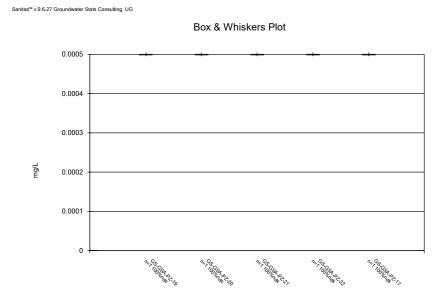
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Plant Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Mercury Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Mercury Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Mercury Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

0.01

0.008

0.006





Box & Whiskers Plot

Constituent: Molybdenum Analysis Run 10/19/2020 4:20 PM Plant Gorgas Client: Southern Company Data: Gorgas GSA

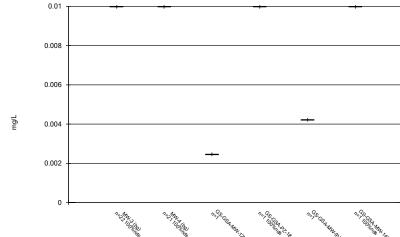
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Box & Whiskers Plot

Constituent: Molybdenum Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

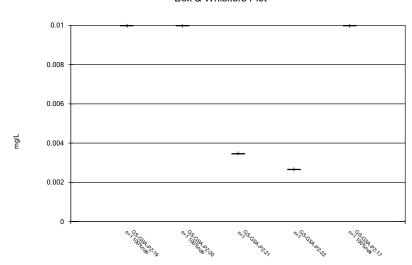




Constituent: Molybdenum Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

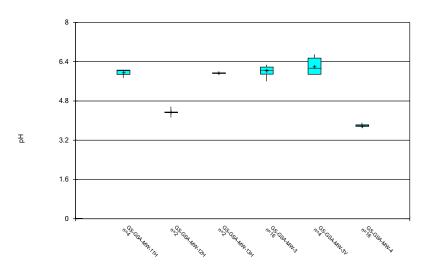
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Box & Whiskers Plot



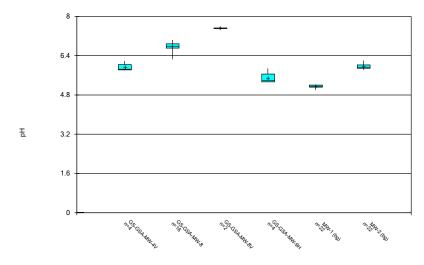
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

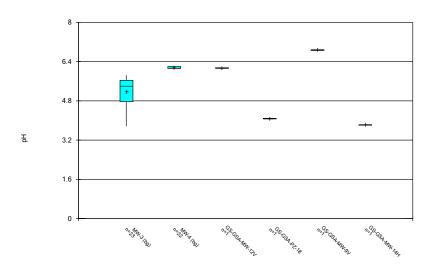
Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

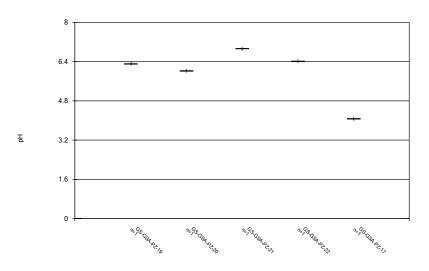
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

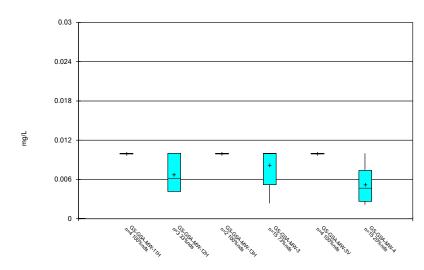
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

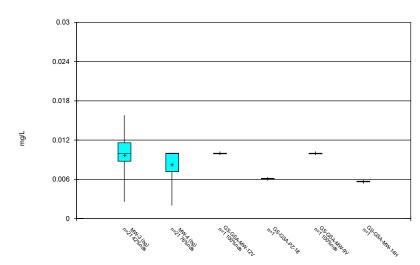
Box & Whiskers Plot



Constituent: Selenium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

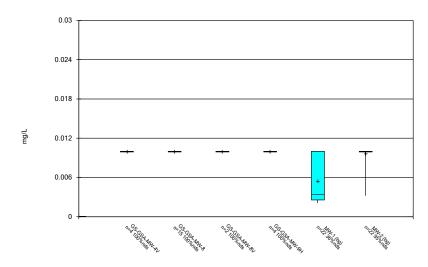
Sanitas[™] v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

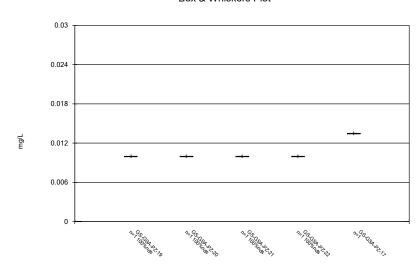
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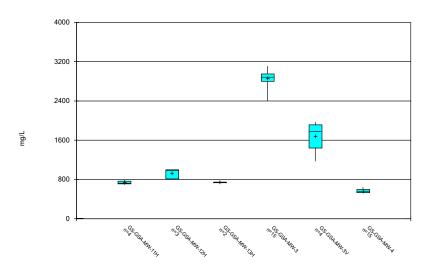
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Box & Whiskers Plot



Constituent: Selenium Analysis Run 10/19/2020 4:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

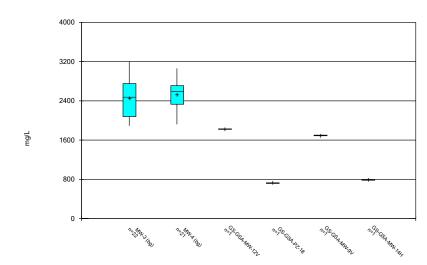
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

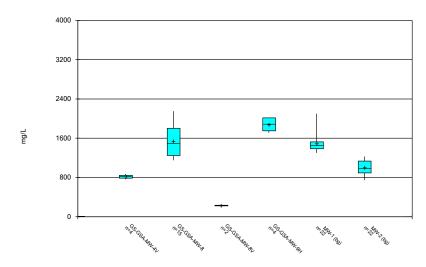
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Box & Whiskers Plot



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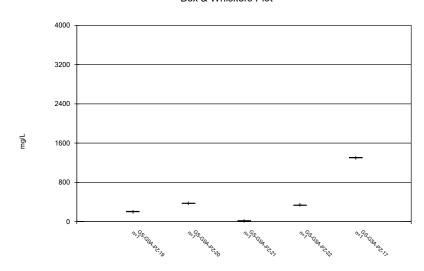
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

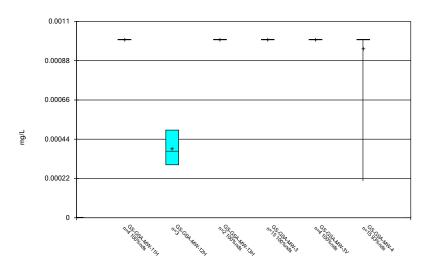
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Sulfate Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

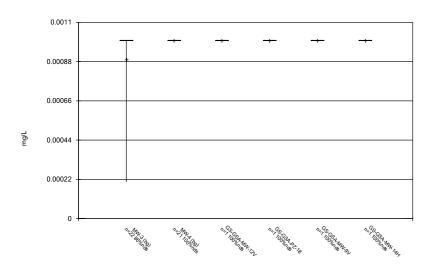
Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

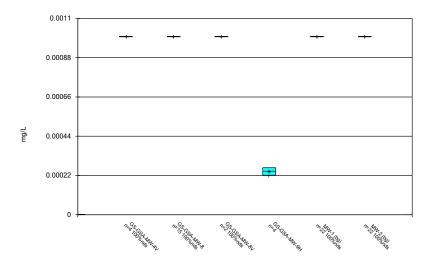
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

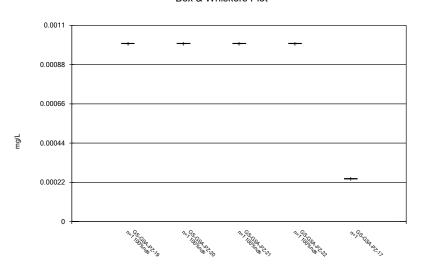
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

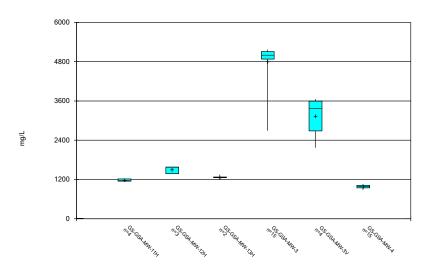
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

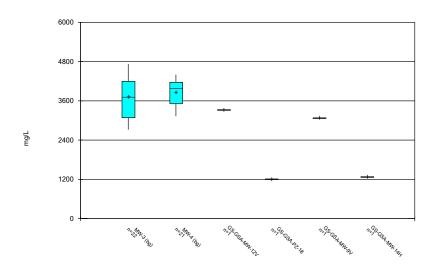
Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

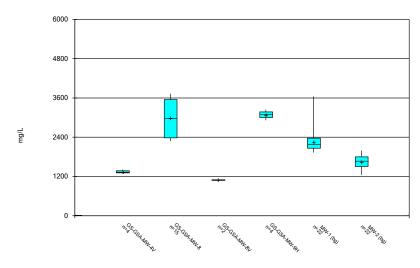
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

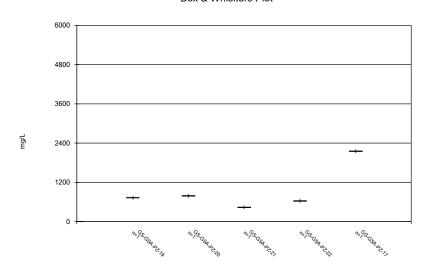
Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 10/19/2020 4:21 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE C.

Outlier Summary Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/19/2020, 4:28 PM MW-3 Beryllium (mg/L) MW-3 Cadmium (mg/L) GS-GSA-MW-3 Selenium (mg/L) MW-3 Selenium (mg/L) 4/25/2016 0.0121 (o) 1/18/2017 0.0169 (o) 4/17/2017 0.294 (o) 2/13/2018 0.0209 (o) 11/19/2018 0.0185 (o)

FIGURE D.

Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/13/2020, 10:17 AM

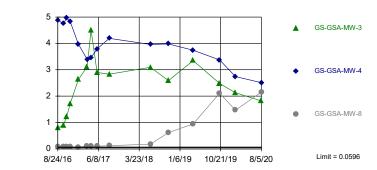
Constituent	Well	Upper Lim	Lower Lim	. Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Boron (mg/L)	GS-GSA-MW-3	0.0596	n/a	8/4/2020	1.82	Yes	87	n/a	n/a	16.09	n/a	n/a	0.0002567	NP (normality) 1 of 2
Boron (mg/L)	GS-GSA-MW-4	0.0596	n/a	8/5/2020	2.51	Yes	87	n/a	n/a	16.09	n/a	n/a	0.0002567	NP (normality) 1 of 2
Boron (mg/L)	GS-GSA-MW-8	0.0596	n/a	8/5/2020	2.16	Yes	87	n/a	n/a	16.09	n/a	n/a	0.0002567	NP (normality) 1 of 2
Calcium (mg/L)	GS-GSA-MW-3	431	n/a	8/4/2020	545	Yes	87	n/a	n/a	0	n/a	n/a	0.0002567	NP (normality) 1 of 2
Calcium (mg/L)	GS-GSA-MW-8	431	n/a	8/5/2020	497	Yes	87	n/a	n/a	0	n/a	n/a	0.0002567	NP (normality) 1 of 2
Chloride (mg/L)	GS-GSA-MW-3	3.773	n/a	8/4/2020	222	Yes	87	1.484	0.2724	3.448	None	sqrt(x)	0.002505	Param 1 of 2
Chloride (mg/L)	GS-GSA-MW-4	3.773	n/a	8/5/2020	41	Yes	87	1.484	0.2724	3.448	None	sqrt(x)	0.002505	Param 1 of 2
Chloride (mg/L)	GS-GSA-MW-8	3.773	n/a	8/5/2020	146	Yes	87	1.484	0.2724	3.448	None	sqrt(x)	0.002505	Param 1 of 2

Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/13/2020, 10:17 AM Constituent Well Upper Lim. Lower Lim. Date Observ. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. Transform Alpha Method GS-GSA-MW-3 8/4/2020 1.82 Yes 87 NP (normality) 1 of 2 Boron (mg/L) 0.0596 n/a n/a 16.09 n/a n/a 0.0002567 Boron (mg/L) GS-GSA-MW-4 0.0596 8/5/2020 2.51 Yes 87 16.09 0.0002567 NP (normality) 1 of 2 n/a n/a n/a n/a n/a Boron (mg/L) GS-GSA-MW-8 0.0596 n/a 8/5/2020 2.16 16.09 0.0002567 NP (normality) 1 of 2 GS-GSA-MW-3 8/4/2020 545 n/a 0.0002567 NP (normality) 1 of 2 Calcium (mg/L) 431 Yes 87 n/a 0 n/a n/a n/a Calcium (mg/L) GS-GSA-MW-4 431 n/a 8/5/2020 94.7 No 87 0 n/a 0.0002567 NP (normality) 1 of 2 GS-GSA-MW-8 431 8/5/2020 497 Yes 87 0 0.0002567 NP (normality) 1 of 2 Calcium (mg/L) n/a n/a n/a n/a n/a Chloride (mg/L) GS-GSA-MW-3 3.773 n/a 8/4/2020 222 1.484 0.2724 3.448 None sqrt(x) 0.002505 Param 1 of 2 Chloride (mg/L) GS-GSA-MW-4 3.773 8/5/2020 41 Yes 87 1.484 0.2724 0.002505 Param 1 of 2 3.448 None sqrt(x) n/a Chloride (mg/L) 8/5/2020 146 Param 1 of 2 GS-GSA-MW-8 3.773 n/a Yes 87 1.484 0.2724 3.448 sqrt(x) 0.002505 Fluoride (mg/L) GS-GSA-MW-3 0.473 8/4/2020 0.389 No 91 0.4581 0.1366 0.002505 Param 1 of 2 n/a 1.099 None sqrt(x) 0.4581 Fluoride (mg/L) GS-GSA-MW-4 0.473 n/a 8/5/2020 0.05ND No 91 0.1366 1.099 None 0.002505 Param 1 of 2 sqrt(x) Fluoride (mg/L) GS-GSA-MW-8 0.473 8/5/2020 0.4581 0.1366 1.099 sqrt(x) 0.002505 Param 1 of 2

Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. 16.09% NDs. Annual perconstituent alpha = 0.001539. Individual comparison alpha = 0.0002567 (1 of 2). Comparing 3 points to limit.

Constituent: Boron Analysis Run 10/13/2020 10:16 AM View: Appendix III - Interwell Plant Gorgas Client: Southern Company Data: Gorgas GSA

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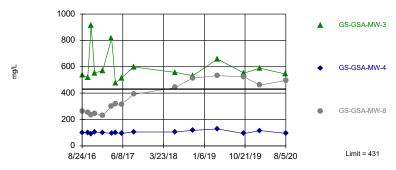
Prediction Limit Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8 Interwell Parametric 400 GS-GSA-MW-3 320 240 GS-GSA-MW-4 160 GS-GSA-MW-8 80 Limit = 3.773 8/24/16 6/8/17 3/23/18 1/6/19 10/21/19 8/5/20

Background Data Summary (based on square root transformation): Mean=1.484, Std. Dev.=0.2724, n=87, 3.448% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9657, critical = 0.961. Kappa = 1.685 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

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Prediction Limit Interwell Non-parametric

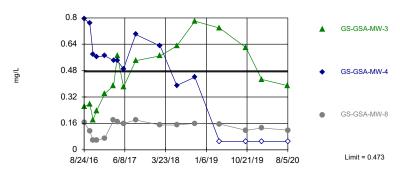


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. Annual per-constituent alpha = 0.001539. Individual comparison alpha = 0.002567 (1 of 2). Comparing 3 points to limit.

Constituent: Calcium Analysis Run 10/13/2020 10:16 AM View: Appendix III - Interwell Plant Gorgas Client: Southern Company Data: Gorgas GSA

 ${\it Sanitas^{w}}\ v.9.6.27\ Groundwater\ Stats\ Consulting.\ UG\ Hollow\ symbols\ indicate\ censored\ values.$ Within Limit

Prediction Limit
Interwell Parametric



Background Data Summary (based on square root transformation): Mean=0.4581, Std. Dev.=0.1366, n=91, 1.099% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9804, critical = 0.962. Kappa = 1.681 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Boron (mg/L) Analysis Run 10/13/2020 10:17 AM View: Appendix III - Interwell Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-4 (bg)	MW-3 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	0.0241 (J)	0.0414 (J)	0.028 (J)				
4/26/2016				0.0231 (J)			
6/20/2016	0.0284 (J)	0.0434 (J)		0.0227 (J)			
6/22/2016			0.0433 (J)				
8/8/2016	0.034 (J)			0.0278 (J)			
8/9/2016		0.0453 (J)	0.0429 (J)				
8/24/2016	0.0316 (J)	0.0451 (J)	0.0431 (J)	0.0247 (J)	0.0898 (J)	0.799	4.88
10/3/2016	0.0367 (J)	0.0511 (J)		0.0307 (J)	0.0821 (J)	0.889	4.75
10/4/2016			0.04 (J)				
10/26/2016	0.0331 (J)	0.0507 (J)	0.0375 (J)	0.0241 (J)	0.0889 (J)	1.23	4.96
11/21/2016	0.035 (J)	0.0458 (J)	0.0406 (J)	0.0202 (J)	0.0788 (J)	1.72	4.82
1/17/2017	0.0259 (J)			0.0201 (J)	0.0607 (J)	2.63	3.97
1/18/2017		0.0445 (J)	0.0548 (J)				
3/20/2017					0.114	3.11	
3/21/2017							3.39
3/22/2017	0.0243 (J)	0.0432 (J)	0.0344 (J)	0.0224 (J)			
4/17/2017						4.51	3.46
4/18/2017	0.0206 (J)	0.0409 (J)	<0.1	<0.1	0.108		
5/30/2017				<0.1	0.105	2.9	3.79
5/31/2017	0.0234 (J)		0.0454 (J)				
8/23/2017	0.0267 (J)	0.042 (J)	0.0425 (J)	0.0253 (J)			
8/24/2017					0.12	2.83	4.19
5/22/2018	0.0251 (J)			0.0224 (J)			
5/23/2018		0.0433 (J)					
5/24/2018			0.0339 (J)				
6/11/2018						3.09	3.96
6/12/2018	0.0275 (J)	0.0478 (J)	0.0371 (J)	0.0214 (J)	0.181		
10/17/2018	0.0321 (J)	0.0468 (J)	0.0596 (J)	0.0216 (J)	0.616	2.59	3.98
11/19/2018	0.0324 (J)	0.0526 (J)	0.0514 (J)	0.0237 (J)			
4/10/2019	<0.1	0.0438 (J)	<0.1	0.0304 (J)	0.944	3.35	3.74
5/14/2019	<0.1	<0.1	<0.1	<0.1			
10/8/2019	0.0371 (J)		0.0537 (J)	<0.1			
10/10/2019		0.0487 (J)					
10/14/2019					2.11	2.48	3.37
10/16/2019	0.0419 (J)	0.0505 (J)	0.05 (J)	0.0385 (J)			
2/3/2020	<0.1	0.0433 (J)	<0.1	<0.1		2.13	
2/4/2020					1.47		2.74
8/3/2020	0.0317 (J)		0.0424 (J)	<0.1			
8/4/2020						1.82	
8/5/2020		0.0459 (J)			2.16		2.51

Constituent: Calcium (mg/L) Analysis Run 10/13/2020 10:17 AM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-4 (bg)	MW-3 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	123	261	224				
4/26/2016				147			
6/20/2016	168	295		152			
6/22/2016			266				
8/8/2016	180			150			
8/9/2016		318	260				
8/24/2016	180	319	274	142	263	539	102
10/3/2016	184	293		139	253	519.7	98.4
10/4/2016			243				
10/26/2016	171	311	254	133	235	916	88.7
11/21/2016	179	320	263	144	246	552	104
1/17/2017	188			131	231	572	102
1/18/2017		417	431				
3/20/2017					298	817	
3/21/2017							94.7
3/22/2017	155	292	318	141			
4/17/2017						476	97.9
4/18/2017	156	302	296	149	317		
5/30/2017				140	316	515	93.9
5/31/2017	151		306				
8/23/2017	155	297	298	152			
8/24/2017					391	598	105
5/22/2018	172			166			
5/23/2018		296					
5/24/2018			297				
6/11/2018						558	105
6/12/2018	179	355	318	203	442		
10/17/2018	200	342	392	171	514	533	117
11/19/2018	221	289	387	154			
4/10/2019	200	356	348	243	533	659	129
5/14/2019	168	254	254	167			
10/8/2019	190		371	157			
10/10/2019		302					
10/14/2019					524	552	93.5
10/16/2019	194	356	346	157			
2/3/2020	172	265	276	172		589	
2/4/2020					461		116
8/3/2020	172		285	148			
8/4/2020						545	
8/5/2020		281			497		94.7

Constituent: Chloride (mg/L) Analysis Run 10/13/2020 10:17 AM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-4 (bg)	MW-3 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	1.9	1.53	1.32				
4/26/2016				1.94			
6/20/2016	3.43	1.85		2.09			
6/22/2016			1.46				
8/8/2016	3.31			2.18			
8/9/2016		1.95	1.35				
8/24/2016	3.23	2.07	1.47	2.22	4.03	204	112
10/3/2016	3.21	2.02		2.34	3.87	220	115
10/4/2016			1.59				
10/26/2016	3.35	2.07	1.27	2.34	4.08	249	115
11/21/2016	3.34	2.39	1.38	2.5	4.39	256	117
1/17/2017	3.58			2.68	7.22	301	99.3
1/18/2017		1.9	1.34				
3/20/2017					5.7	320	
3/21/2017							79
3/22/2017	3.4	1.5 (J)	2	3.7			
4/17/2017						340	85
4/18/2017	2.6	1.6 (J)	2.2	2.4	4.7		
5/30/2017				2.6	15	310	99
5/31/2017	4.4		1.5 (J)				
8/23/2017	4.4	2.3	1.8 (J)	2.7			
8/24/2017					93	290	110
5/22/2018	3.2			2.3			
5/23/2018		2					
5/24/2018			1.6 (J)				
6/11/2018						260	81
6/12/2018	3.7	1.7 (J)	1.4 (J)	2.3	140		
10/17/2018	4.6	1.5 (J)	<2	1.7 (J)	180	270	85
11/19/2018	3	<2	<2	1.7 (J)			
4/10/2019	1.76	1.88	2.25	2.36	174	249	74.3
5/14/2019	2.98	1.82	2.28	2.28			
10/8/2019	4.26		1.36	2.31			
10/10/2019		1.93					
10/14/2019					207	228	59.1
10/16/2019	4.04	1.92	1.4	2.42			
2/3/2020	2.48	1.72	2.12	2.07		267	
2/4/2020					94.1		43.2
8/3/2020	4.03		1.17	2.05			
8/4/2020						222	
8/5/2020		1.57			146		41

Constituent: Fluoride (mg/L) Analysis Run 10/13/2020 10:17 AM View: Appendix III - Interwell Plant Gorgas Client: Southern Company Data: Gorgas GSA

				_		_	
	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	0.149 (J)	0.243 (J)	0.372				
4/26/2016				0.146 (J)			
6/20/2016	0.148 (J)		0.361	0.148 (J)			
6/22/2016		0.269 (J)					
8/8/2016	0.134 (J)			0.137 (J)			
8/9/2016		0.363	0.326				
8/24/2016	0.129 (J)	0.346	0.329	0.133 (J)	0.165 (J)	0.264 (J)	0.793
10/3/2016	0.086 (J)		0.287 (J)	0.103 (J)	0.114 (J)	0.276 (J)	0.769
10/4/2016		0.266 (J)					
10/26/2016	0.027 (J)	0.266 (J)	0.194 (J)	0.05 (J)	0.056 (J)	0.182 (J)	0.578
11/21/2016	0.027 (J)	0.244 (J)	0.192 (J)	0.047 (J)	0.059 (J)	0.238 (J)	0.562
1/17/2017	0.066 (J)			0.09 (J)	0.07 (J)	0.34	0.571
1/18/2017		0.385	0.223 (J)				
3/20/2017					0.18	0.39	
3/21/2017							0.54
3/22/2017	0.13	0.41	0.32	0.12			
4/17/2017						0.57	0.54
4/18/2017	0.16	0.29	0.32	0.12	0.17		
5/30/2017				0.13	0.16	0.38	0.49
5/31/2017	0.13	0.37					
8/23/2017	0.16	0.55	0.38	0.16			
8/24/2017					0.18	0.54	0.7
2/13/2018	0.22 (D)	0.27 (D)	0.38 (D)	0.14 (D)	0.15 (D)	0.57 (D)	0.63 (D)
5/22/2018	0.17			0.16			
5/23/2018			0.38				
5/24/2018		0.6					
6/11/2018						0.63	0.39
6/12/2018	0.16	0.53	0.39	0.16	0.15		
10/17/2018	0.16	0.63	0.39	0.18	0.16	0.78	0.44
11/19/2018	0.18	0.31	0.36	0.15			
4/10/2019	0.262	0.273	0.384	0.102	0.156	0.738	<0.1
5/14/2019	0.17	0.281	0.335	0.119			
10/8/2019	0.164	0.225		0.0924 (J)			
10/10/2019			0.304				
10/14/2019					0.118	0.619	<0.1
10/16/2019	0.114	0.106	0.302	0.0756 (J)			
2/3/2020	0.182	0.256	0.37	0.0982 (J)		0.427	
2/4/2020					0.132		<0.1
8/3/2020	0.122	0.0766 (J)		<0.1			
8/4/2020						0.389	
8/5/2020			0.359		0.119		<0.1

FIGURE E.

Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/13/2020, 10:25 AM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Date
 Observ.
 Sig.
 Bg N
 Bg Mean
 Std. Dev.
 %NDs
 ND Adj.
 Transform
 Alpha
 Method

 pH (pH)
 MW-1
 5.24
 5.09
 8/3/2020
 5.08
 Yes
 18
 5.165
 0.03869
 0
 None
 No
 0.001253
 Param 1 of 2

Intrawell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/13/2020, 10:25 AM Constituent Well Upper Lim. Lower Lim. Date Observ. Bg N Bg Mean Std. Dev. %NDs ND Adj. Transform Alpha Method GS-GSA-MW-3 0.2034 pH (pH) 6.454 8/4/2020 6.09 No 13 6.032 None No 0.001253 Param 1 of 2 0.04034 pH (pH) GS-GSA-MW-4 3.868 3.701 8/5/2020 3.86 Nο 13 3.785 0 None No 0.001253 Param 1 of 2 pH (pH) GS-GSA-MW-8 6.366 8/5/2020 6.76 6.784 0.2012 0.001253 Param 1 of 2 MW-1 5.24 8/3/2020 Yes 18 5.165 0.03869 0 Param 1 of 2 pH (pH) 5.09 5.08 None Nο 0.001253 pH (pH) MW-2 6.161 5.76 8/3/2020 5.95 No 18 5.961 0.1039 0.001253 Param 1 of 2 MW-3 6.175 8/3/2020 19 27.62 5.502 pH (pH) 4.135 5.06 No 0 None x^2 0.001253 Param 1 of 2 pH (pH) MW-4 6.246 6.063 8/5/2020 6.15 No 18 6.154 0.04755 0 None No 0.001253 Param 1 of 2 GS-GSA-MW-3 12 Param 1 of 2 Sulfate (mg/L) 3089 8/4/2020 2820 1.9e17 4.2e16 0 x^5 0.002505 n/a No None Sulfate (mg/L) GS-GSA-MW-4 648.7 n/a 8/5/2020 519 No 12 564.5 39.86 0 None 0.002505 Param 1 of 2 Param 1 of 2 Sulfate (mg/L) GS-GSA-MW-8 2123 n/a 8/5/2020 1880 No 12 307.9 0 None No 0.002505 Sulfate (mg/L) MW-1 2100 8/3/2020 1370 18 n/a Ω 0.005373 NP (normality) 1 of 2 n/a Nο n/a n/a n/a MW-2 1247 8/3/2020 907 1003 126.2 0.002505 Param 1 of 2 Sulfate (mg/L) n/a No No MW-3 2431 379.6 Param 1 of 2 Sulfate (mg/L) 3164 n/a 8/3/2020 2330 Nο 18 0 None Nο 0.002505 Sulfate (mg/L) MW-4 3023 n/a 8/5/2020 1930 No 17 2558 238.2 0 0.002505 Param 1 of 2 GS-GSA-MW-3 8/4/2020 5110 12 1.4e22 0 0.002505 Param 1 of 2 Total dissolved solids (mg/L) 5416 5.4e21 x^6 n/a No None Total dissolved solids (mg/L) GS-GSA-MW-4 1100 n/a 8/5/2020 938 No 12 990.3 51.88 0 None No 0.002505 Param 1 of 2 Total dissolved solids (mg/L) GS-GSA-MW-8 4264 8/5/2020 3610 8 3090 477.8 0 None 0.002505 Param 1 of 2 n/a No No Total dissolved solids (mg/L) MW-1 2526 n/a 8/3/2020 2200 No 18 2183 178 0 None No 0.002505 Param 1 of 2 Total dissolved solids (mg/L) MW-2 2032 n/a 8/3/2020 1650 No 18 1640 202.8 0 0.002505 Param 1 of 2 None No

3661

628 6

367.3

Ω

None

Nο

0.002505

0.002505

Param 1 of 2

Param 1 of 2

18

17 3923

Nο

Total dissolved solids (mg/L)

Total dissolved solids (mg/L)

MW-3

4874

4639

n/a

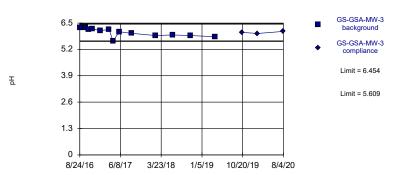
n/a

8/3/2020

8/5/2020

3760

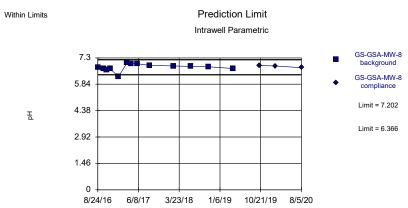
Within Limits Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=6.032, Std. Dev.=0.2034, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9319, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.005102.

Constituent: pH Analysis Run 10/13/2020 10:21 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

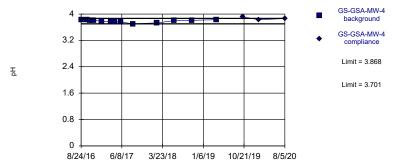
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Background Data Summary: Mean=6.784, Std. Dev.=0.2012, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8769, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

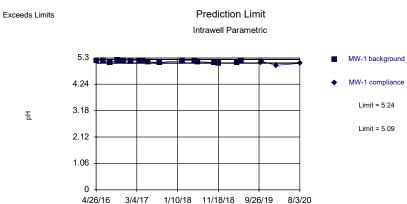




Background Data Summary: Mean=3.785, Std. Dev.=0.04034, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9065, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 10/13/2020 10:21 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

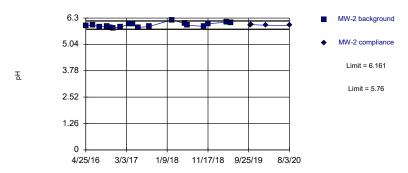
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Background Data Summary: Mean=5.165, Std. Dev.=0.03869, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8696, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=5.961, Std. Dev.=0.1039, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9465, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.005132).

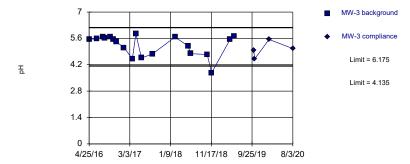
Constituent: pH Analysis Run 10/13/2020 10:21 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Background Data Summary: Mean=6.154, Std. Dev.=0.04755, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9068, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

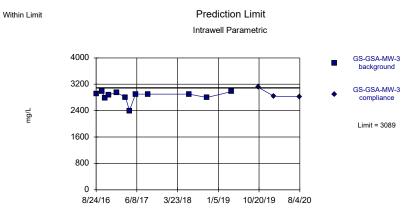




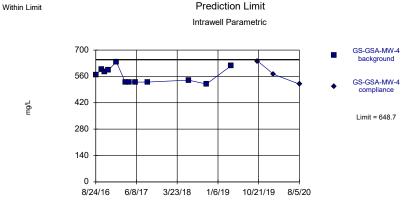
Background Data Summary (based on square transformation): Mean=27.62, Std. Dev.=5.502, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8755, critical = 0.863. Kappa = 1.912 (c=7, w=3, 1 of 2, event alpha = 0.06132). Report alpha = 0.002505.

Constituent: pH Analysis Run 10/13/2020 10:21 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



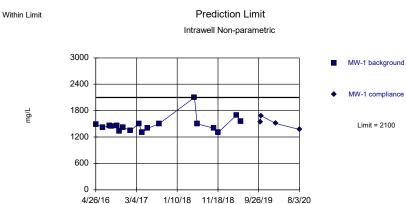
Background Data Summary (based on x 5 transformation): Mean=1.9e17, Std. Dev.=4.2e16, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8091, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.00132). Report alpha = 0.002505.



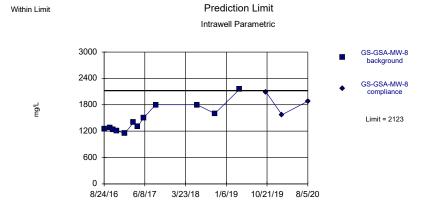
Background Data Summary: Mean=564.5, Std. Dev.=39.86, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8799, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505

Constituent: Sulfate Analysis Run 10/13/2020 10:21 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



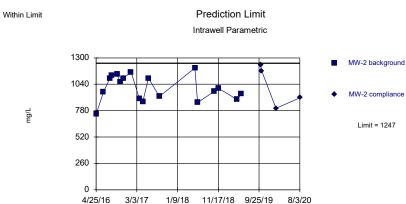
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 18 background values. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).



Background Data Summary: Mean=1473, Std. Dev.=307.9, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8741, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 10/13/2020 10:21 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

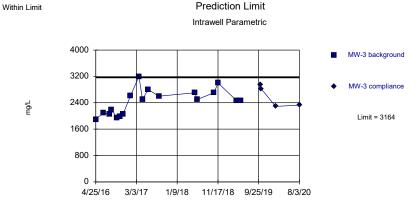


Background Data Summary: Mean=1003, Std. Dev.=126.2, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

4/25/16

3/3/17

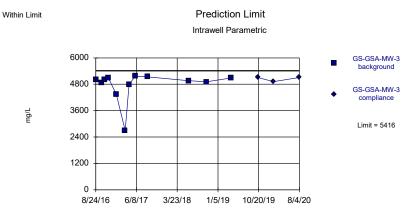
Within Limit



Background Data Summary: Mean=2431, Std. Dev.=379.6, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9476, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505

Constituent: Sulfate Analysis Run 10/13/2020 10:21 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Background Data Summary (based on x^6 transformation): Mean=1.4e22, Std. Dev.=5.4e21, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8255, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.00132). Report alpha = 0.002505.

Annual Parametric

Annual Parametric

MW-4 background

MW-4 compliance

Limit = 3023

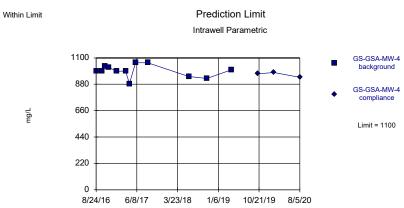
Prediction Limit

Background Data Summary: Mean=2558, Std. Dev.=238.2, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.963, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

1/10/18 11/18/18 9/27/19

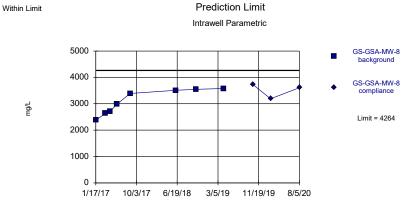
Constituent: Sulfate Analysis Run 10/13/2020 10:21 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Background Data Summary: Mean=990.3, Std. Dev.=51.88, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9383, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

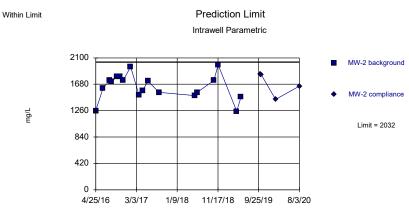




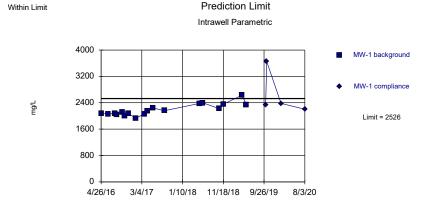
Background Data Summary: Mean=3090, Std. Dev.=477.8, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8736, critical = 0.749. Kappa = 2.458 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 10/13/2020 10:22 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



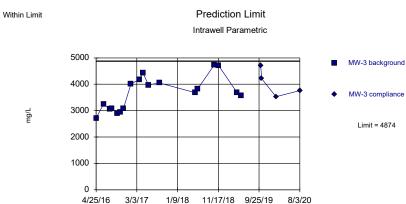
Background Data Summary: Mean=1640, Std. Dev.=202.8, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.952, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.



Background Data Summary: Mean=2183, Std. Dev.=178, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9142, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 10/13/2020 10:22 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Background Data Summary: Mean=3661, Std. Dev.=628.6, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9455, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Within Limit Prediction Limit
Intrawell Parametric

5000 4000 4000 MW-4 compliance Limit = 4639 Limit = 4639

Background Data Summary: Mean=3923, Std. Dev.=367.3, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8694, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.



	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	6.28	
10/3/2016	6.28	
10/26/2016	6.19	
11/21/2016	6.2	
1/17/2017	6.13	
3/20/2017	6.17	
4/17/2017	5.6	
5/30/2017	6.07	
8/24/2017	5.99	
2/13/2018	5.88	
6/11/2018	5.91	
10/17/2018	5.88	
4/10/2019	5.83	
10/14/2019		6.04
2/3/2020		5.98
8/4/2020		6.09

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	3.83 (E)	
10/3/2016	3.82 (E)	
10/26/2016	3.81 (E)	
11/21/2016	3.81	
1/17/2017	3.78	
3/21/2017	3.76	
4/17/2017	3.76	
5/30/2017	3.76	
8/24/2017	3.7	
2/13/2018	3.73	
6/11/2018	3.8	
10/17/2018	3.81	
4/10/2019	3.83	
10/14/2019		3.91
2/4/2020		3.83
8/5/2020		3.86

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	6.78	
10/3/2016	6.71	
10/26/2016	6.65	
11/21/2016	6.7	
1/17/2017	6.25	
3/20/2017	7.04	
4/18/2017	6.99	
5/30/2017	6.98	
8/24/2017	6.89	
2/13/2018	6.85	
6/12/2018	6.83	
10/17/2018	6.81	
4/10/2019	6.71	
10/14/2019		6.88
2/4/2020		6.85
8/5/2020		6.76

	MW-1	MW-1
4/26/2016	5.2	
6/20/2016	5.18	
8/8/2016	5.12	
10/3/2016	5.21 (D)	
10/26/2016	5.2	
11/21/2016	5.19 (D)	
1/17/2017	5.17 (D)	
3/22/2017	5.2 (D)	
4/18/2017	5.2	
5/30/2017	5.14 (D)	
8/23/2017	5.12 (D)	
2/13/2018	5.18	
5/22/2018	5.2	
6/12/2018	5.15	
10/17/2018	5.12	
11/19/2018	5.09 (D)	
4/10/2019	5.11	
5/14/2019	5.19	
10/8/2019		5.12
10/16/2019		5.16
2/3/2020		5
8/3/2020		5.08

	MW-2	MW-2
4/25/2016	5.94	
6/20/2016	5.96	
8/8/2016	5.88	
10/3/2016	5.91 (D)	
10/26/2016	5.84	
11/21/2016	5.82 (D)	
1/17/2017	5.87 (D)	
3/22/2017	6.01 (D)	
4/18/2017	6.02	
5/31/2017	5.85 (D)	
8/23/2017	5.89 (D)	
2/13/2018	6.21	
5/22/2018	6.04	
6/12/2018	5.95	
10/17/2018	5.9	
11/19/2018	6.03 (D)	
4/10/2019	6.1	
5/14/2019	6.07	
10/8/2019		5.96
10/16/2019		5.98
2/3/2020		5.95
8/3/2020		5.95

	MW-3	MW-3
4/25/2016	5.56	
6/22/2016	5.57	
8/9/2016	5.67	
8/24/2016	5.63	
10/4/2016	5.69 (D)	
10/26/2016	5.56	
11/21/2016	5.42 (D)	
1/18/2017	5.11 (D)	
3/22/2017	4.52 (D)	
4/18/2017	5.84	
5/31/2017	4.56 (D)	
8/23/2017	4.77 (D)	
2/13/2018	5.67	
5/24/2018	5.19	
6/12/2018	4.79	
10/17/2018	4.75	
11/19/2018	3.77 (D)	
4/10/2019	5.54	
5/14/2019	5.71	
10/8/2019		4.98
10/16/2019		4.51
2/3/2020		5.54
8/3/2020		5.06

	MW-4	MW-4
4/25/2016	6.22	
6/20/2016	6.21	
8/9/2016	6.11	
8/24/2016	6.11	
10/3/2016	6.13 (D)	
10/26/2016	6.12	
11/21/2016	6.09 (D)	
1/18/2017	6.09 (D)	
3/22/2017	6.15 (D)	
4/18/2017	6.19	
8/23/2017	6.12	
2/13/2018	6.22	
5/23/2018	6.21	
6/12/2018	6.16	
10/17/2018	6.12	
11/19/2018	6.16 (D)	
4/10/2019	6.14	
5/14/2019	6.23	
10/10/2019		6.15
10/16/2019		6.19
2/3/2020		6.14
8/5/2020		6.15

Constituent: Sulfate (mg/L) Analysis Run 10/13/2020 10:25 AM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	2910	
10/3/2016	2980	
10/26/2016	2790	
11/21/2016	2880	
1/17/2017	2950	
3/20/2017	2800	
4/17/2017	2400	
5/30/2017	2900	
8/24/2017	2900	
6/11/2018	2900	
10/17/2018	2800	
4/10/2019	2980	
10/14/2019		3110
2/3/2020		2840
8/4/2020		2820

Constituent: Sulfate (mg/L) Analysis Run 10/13/2020 10:25 AM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	567	
10/3/2016	596	
10/26/2016	585	
11/21/2016	593	
1/17/2017	637	
3/21/2017	530	
4/17/2017	530	
5/30/2017	530	
8/24/2017	530	
6/11/2018	540	
10/17/2018	520	
4/10/2019	616	
10/14/2019		641
2/4/2020		571
8/5/2020		519

Constituent: Sulfate (mg/L) Analysis Run 10/13/2020 10:25 AM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	1250	
10/3/2016	1270	
10/26/2016	1240	
11/21/2016	1210	
1/17/2017	1150	
3/20/2017	1400	
4/18/2017	1300	
5/30/2017	1500	
8/24/2017	1800	
6/12/2018	1800	
10/17/2018	1600	
4/10/2019	2150	
10/14/2019		2090
2/4/2020		1570
8/5/2020		1880

Constituent: Sulfate (mg/L) Analysis Run 10/13/2020 10:25 AM View: Appendix III - Intrawell Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	1490	
6/20/2016	1420	
8/8/2016	1460	
8/24/2016	1450	
10/3/2016	1460	
10/26/2016	1330	
11/21/2016	1420	
1/17/2017	1350	
3/22/2017	1500	
4/18/2017	1300	
5/30/2017	1400	
8/23/2017	1500	
5/22/2018	2100	
6/12/2018	1500	
10/17/2018	1400	
11/19/2018	1300	
4/10/2019	1700	
5/14/2019	1560	
10/8/2019		1540
10/16/2019		1680
2/3/2020		1510

1370

8/3/2020

	MW-2	MW-2
4/25/2016	745	
6/20/2016	964	
8/8/2016	1100	
8/24/2016	1130	
10/3/2016	1140	
10/26/2016	1060	
11/21/2016	1100	
1/17/2017	1160	
3/22/2017	900	
4/18/2017	870	
5/31/2017	1100	
8/23/2017	920	
5/22/2018	1200	
6/12/2018	860	
10/17/2018	970	
11/19/2018	1000	
4/10/2019	889	
5/14/2019	948	
10/8/2019		1230
10/16/2019		1170
2/3/2020		803
8/3/2020		907

		MW-3	MW-3
4/2	25/2016	1890	
6/2	22/2016	2100	
8/9	9/2016	2050	
8/2	24/2016	2190	
10	0/4/2016	1950	
10	0/26/2016	1980	
11	1/21/2016	2060	
1/1	18/2017	2620	
3/2	22/2017	3200	
4/1	18/2017	2500	
5/3	31/2017	2800	
8/2	23/2017	2600	
5/2	24/2018	2700	
6/1	12/2018	2500	
10	0/17/2018	2700	
11	1/19/2018	3000	
4/1	10/2019	2460	
5/1	14/2019	2460	
10	0/8/2019		2950
10	0/16/2019		2820
2/3	3/2020		2290
8/3	3/2020		2330

	MW-4	MW-4
4/25/2016	2260	
6/20/2016	2500	
8/9/2016	2750	
8/24/2016	2770	
10/3/2016	3060	
10/26/2016	2650	
11/21/2016	2720	
1/18/2017	2650	
3/22/2017	2700	
4/18/2017	2400	
8/23/2017	2700	
5/23/2018	2400	
6/12/2018	2600	
10/17/2018	2600	
11/19/2018	2400	
4/10/2019	2090	
5/14/2019	2240	
10/10/2019		2690
10/16/2019		3050
2/3/2020		1920
8/5/2020		1930

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	5020	
10/3/2016	4880	
10/26/2016	5020	
11/21/2016	5090	
1/17/2017	4330	
3/20/2017	2690	
4/17/2017	4780	
5/30/2017	5170	
8/24/2017	5140	
6/11/2018	4960	
10/17/2018	4910	
4/10/2019	5090	
10/14/2019		5110
2/3/2020		4920
8/4/2020		5110

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	992	
10/3/2016	988	
10/26/2016	1030	
11/21/2016	1020	
1/17/2017	988	
3/21/2017	990	
4/17/2017	884	
5/30/2017	1060	
8/24/2017	1060	
6/11/2018	944	
10/17/2018	928	
4/10/2019	1000	
10/14/2019		967
2/4/2020		978
8/5/2020		938

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	2280	
10/3/2016	2370	
10/26/2016	2350	
11/21/2016	2530	
1/17/2017	2380	
3/20/2017	2630	
4/18/2017	2700	
5/30/2017	2980	
8/24/2017	3390	
6/12/2018	3510	
10/17/2018	3550	
4/10/2019	3580	
10/14/2019		3730
2/4/2020		3190
8/5/2020		3610

	MW-1	MW-1
4/26/2016	2080	
6/20/2016	2060	
8/8/2016	2070	
8/24/2016	2040	
10/3/2016	2110	
10/26/2016	2000	
11/21/2016	2070	
1/17/2017	1930	
3/22/2017	2060	
4/18/2017	2140	
5/30/2017	2240	
8/23/2017	2160	
5/22/2018	2380	
6/12/2018	2400	
10/17/2018	2220	
11/19/2018	2360	
4/10/2019	2630	
5/14/2019	2340 (D)	
10/8/2019		2330
10/16/2019		3650
2/3/2020		2380
8/3/2020		2200

	MW-2	MW-2
4/25/2016	1260	
6/20/2016	1620	
8/8/2016	1740	
8/24/2016	1720	
10/3/2016	1800	
10/26/2016	1800	
11/21/2016	1740	
1/17/2017	1960	
3/22/2017	1510	
4/18/2017	1580	
5/31/2017	1730	
8/23/2017	1550	
5/22/2018	1500	
6/12/2018	1550	
10/17/2018	1740	
11/19/2018	1990	
4/10/2019	1250	
5/14/2019	1480	
10/8/2019		1840
10/16/2019		1830
2/3/2020		1440
8/3/2020		1650

	MW-3	MW-3
4/25/2016	2720	
6/22/2016	3250	
8/9/2016	3050	
8/24/2016	3080	
10/4/2016	2900	
10/26/2016	2940	
11/21/2016	3090	
1/18/2017	4020	
3/22/2017	4180	
4/18/2017	4440	
5/31/2017	3970	
8/23/2017	4050	
5/24/2018	3680	
6/12/2018	3820	
10/17/2018	4730	
11/19/2018	4710	
4/10/2019	3680	
5/14/2019	3580 (D)	
10/8/2019		4720
10/16/2019		4210
2/3/2020		3530
8/3/2020		3760

	MW-4	MW-4
4/25/2016	3300	
6/20/2016	3870	
8/9/2016	4140	
8/24/2016	4190	
10/3/2016	4190	
10/26/2016	4400	
11/21/2016	4230	
1/18/2017	4120	
3/22/2017	3980	
4/18/2017	3880	
8/23/2017	3990	
5/23/2018	3740	
6/12/2018	4080	
10/17/2018	4250	
11/19/2018	3920	
4/10/2019	3280	
5/14/2019	3130 (D)	
10/10/2019		4000
10/16/2019		4060
2/3/2020		3240
8/5/2020		3200

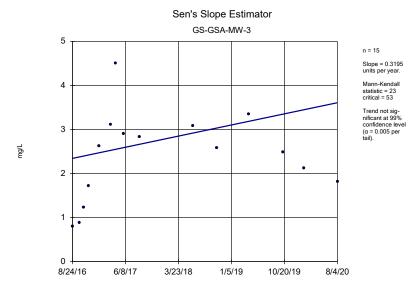
FIGURE F.

Trend Tests Summary Table - Prediction Limit Exceedances - Significant Results

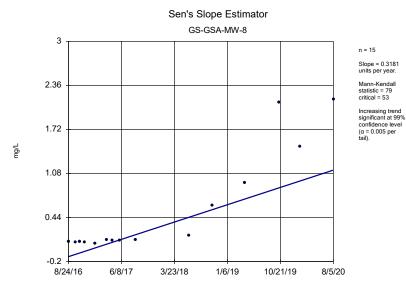
	•							-			
	Plant Gorgas Client: Southern Com	pany Data: Go	rgas GSA	Printed 1	0/13/2	020, 10	:30 AM				
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	GS-GSA-MW-4	-0.494	-65	-53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-8	0.3181	79	53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-8	92.54	71	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	-17.43	-73	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-8	41.11	81	53	Yes	15	0	n/a	n/a	0.01	NP

Trend Tests Summary Table - Prediction Limit Exceedances - All Results

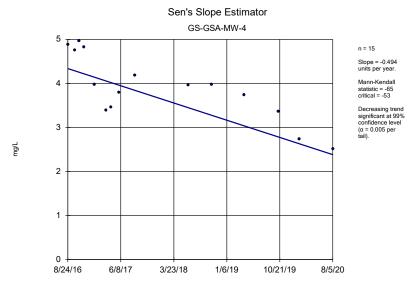
	Plant Gorgas	Client: Southern Company	/ Data: Gorç	gas GSA	Printed 10)/13/20	020, 10:	30 AM				
Constituent	Well	<u>s</u>	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	GS-GSA-MW-3	0	0.3195	23	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-4	-4	0.494	-65	-53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-8	0).3181	79	53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	MW-1 (bg)	0	0.003899	69	92	No	22	27.27	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0	0.003227	72	92	No	22	13.64	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0	0.002599	59	92	No	22	18.18	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	0	0.0008345	41	87	No	21	4.762	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	3	3.862	4	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-8	9	2.54	71	53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	6	6.226	91	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	5	5.509	51	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	2	25.31	81	92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)		1.57	-4	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	0)	0	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	مي .	17.43	-73	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-8	4	11.11	81	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-1 (bg)	-(0.005518	-4	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	0).1676	22	92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0	0.02724	25	92	No	22	9.091	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-(0.04908	-40	-87	No	21	4.762	n/a	n/a	0.01	NP



Constituent: Boron Analysis Run 10/13/2020 10:27 AM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

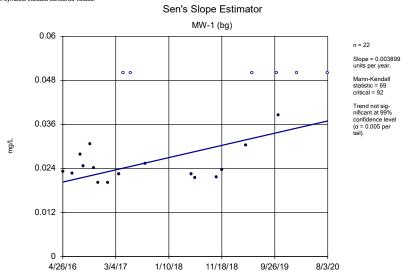


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Plant Gorgas Client: Southern Company Data: Gorgas GSA

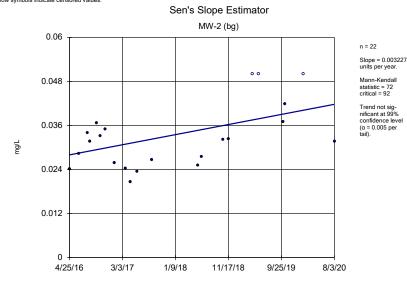


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Plant Gorgas Client: Southern Company Data: Gorgas GSA

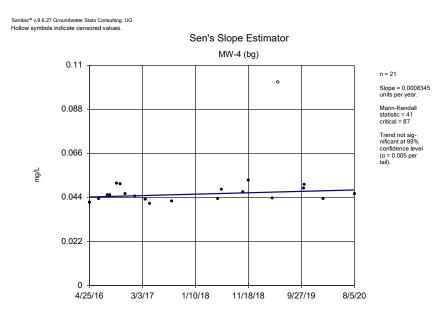
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



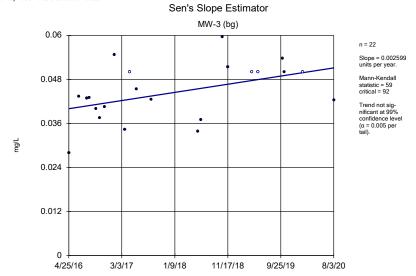
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Plant Gorgas Client: Southern Company Data: Gorgas GSA



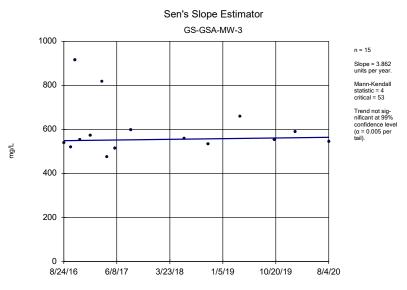
Constituent: Boron Analysis Run 10/13/2020 10:28 AM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA



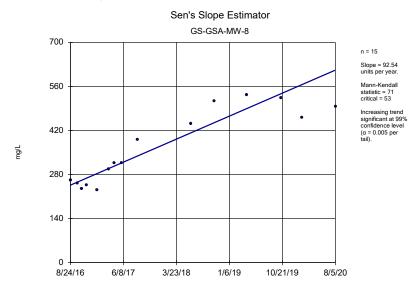
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Plant Gorgas Client: Southern Company Data: Gorgas GSA

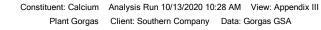


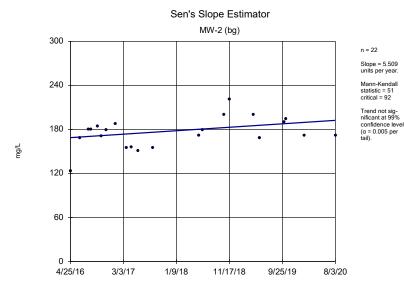
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Plant Gorgas Client: Southern Company Data: Gorgas GSA



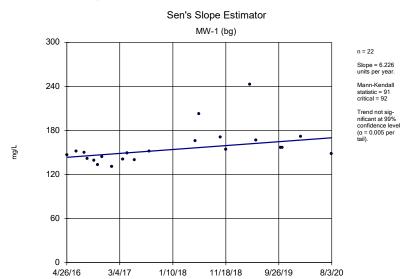
Constituent: Calcium Analysis Run 10/13/2020 10:28 AM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA





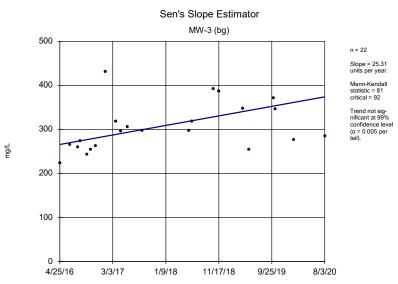


Constituent: Calcium Analysis Run 10/13/2020 10:28 AM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

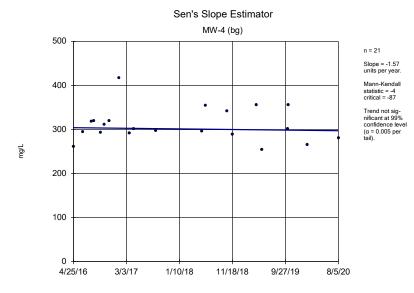


Constituent: Calcium Analysis Run 10/13/2020 10:28 AM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

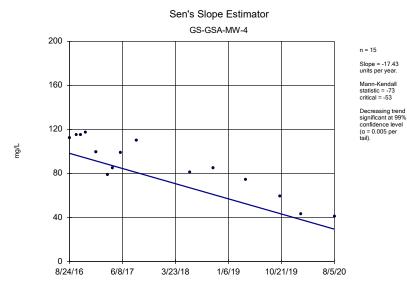


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Plant Gorgas Client: Southern Company Data: Gorgas GSA

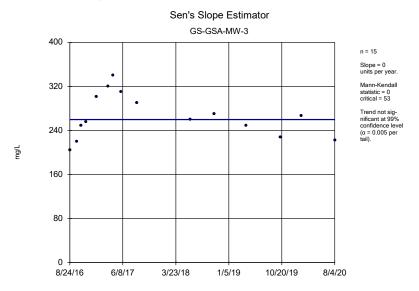


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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

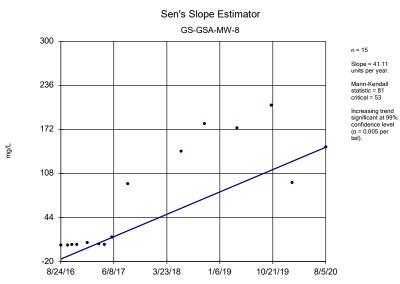


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Plant Gorgas Client: Southern Company Data: Gorgas GSA

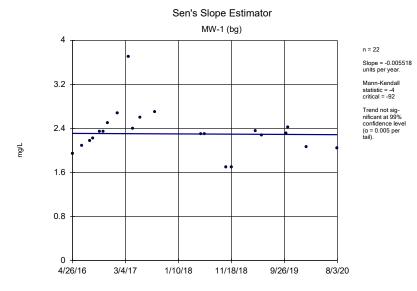


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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



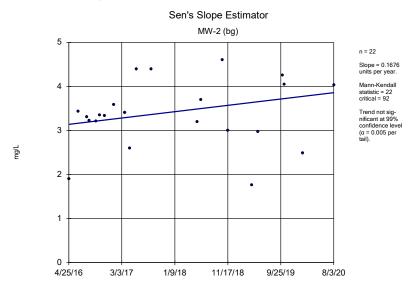
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Plant Gorgas Client: Southern Company Data: Gorgas GSA



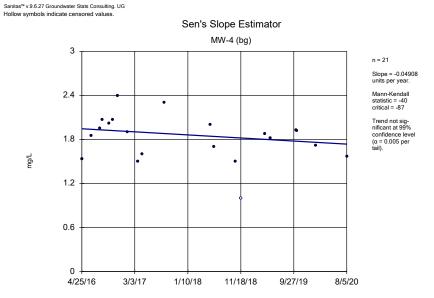
Constituent: Chloride Analysis Run 10/13/2020 10:28 AM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG Hollow symbols indicate censored values Sen's Slope Estimator MW-3 (bg) n = 22 Slope = 0.02724 units per year. 2.4 Mann-Kendall statistic = 25 critical = 92 Trend not sig-nificant at 99% confidence level 1.8 (α = 0.005 per tail). mg/L 1.2 0.6 4/25/16 3/3/17 1/9/18 11/17/18 9/25/19 8/3/20

Constituent: Chloride Analysis Run 10/13/2020 10:28 AM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Chloride Analysis Run 10/13/2020 10:28 AM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Chloride

Analysis Run 10/13/2020 10:28 AM View: Appendix III

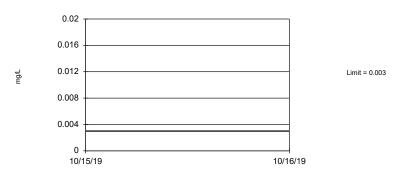
Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE G.

Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:59 PM Upper Lim. Lower Lim. Bg N Bg Mean Std. Dev. %NDs ND Adj. Transform Constituent <u>Alpha</u> Method 0.003 92.41 0.01738 NP Inter(NDs) Antimony (mg/L) 79 n/a n/a n/a n/a n/a Arsenic (mg/L) 0.005 79 0.01738 NP Inter(NDs) Barium (mg/L) 0.01531 n/a 79 -4.516 0.1715 0 None In(x) 0.05 Inter 0.0121 Beryllium (mg/L) 77 n/a 81.82 n/a 0.01926 NP Inter(NDs) n/a n/a n/a Cadmium (mg/L) 0.00598 78 48.72 0.0183 NP Inter(normal... 0.0105 94.94 0.01738 NP Inter(NDs) Chromium (mg/L) n/a 79 n/a n/a n/a 1.07 24.05 0.01738 NP Inter(normal... Cobalt (mg/L) n/a 79 n/a n/a n/a n/a Combined Radium 226 + 228 (pCi/L) 1.151 65 0.4707 No 0.05 0.4625 Fluoride (mg/L) 0.5302 83 0.1358 0 None sqrt(x) 0.05 Inter 0.00692 0.01738 NP Inter(NDs) Lead (mg/L) n/a 79 n/a n/a 96.2 n/a n/a Lithium (mg/L) 0.419 79 0.01738 NP Inter(normal... 0.0005 100 0.01738 NP Inter(NDs) Mercury (mg/L) n/a 79 n/a n/a n/a n/a 0.01 100 0.01738 NP Inter(NDs) Molybdenum (mg/L) 79 n/a n/a n/a n/a n/a Selenium (mg/L) 0.0158 66.67 0.0183 NP Inter(NDs) n/a Thallium (mg/L) 0.001 79 n/a 96.2 0.01738 NP Inter(NDs)

Tolerance Limit Interwell Non-parametric



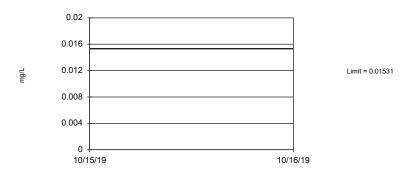
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 92.41% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Antimony Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

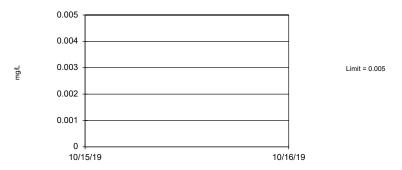
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary (based on natural log transformation): Mean=-4.516, Std. Dev.=0.1715, n=79. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9604, critical = 0.957. Report alpha = 0.05.

Tolerance Limit Interwell Non-parametric

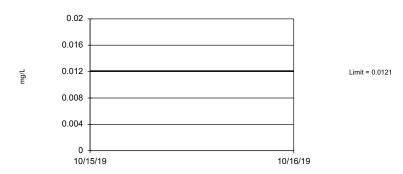


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 91.14% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Arsenic Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

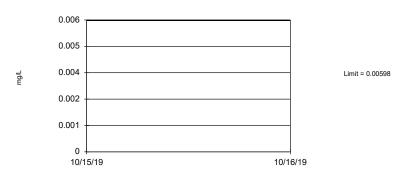
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 77 background values. 81.82% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.5. Report alpha = 0.01926.

Tolerance Limit Interwell Non-parametric



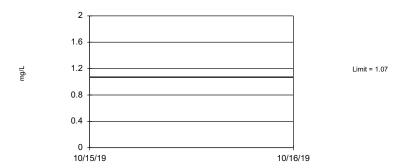
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 78 background values. 48.72% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.05. Report alpha = 0.0183.

Constituent: Cadmium Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

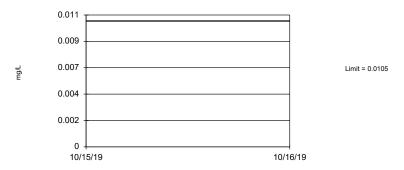
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. 24.05% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05. Report alpha = 0.01738.

Tolerance Limit Interwell Non-parametric



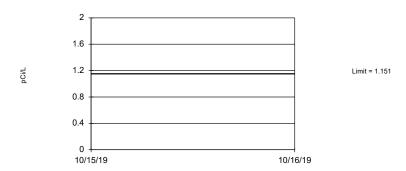
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 94.94% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Chromium Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

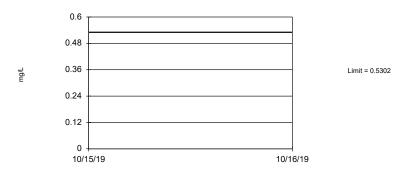
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary: Mean=0.4707, Std. Dev.=0.3403, n=65. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.982, critical = 0.948. Report alpha = 0.05.

Tolerance Limit Interwell Parametric



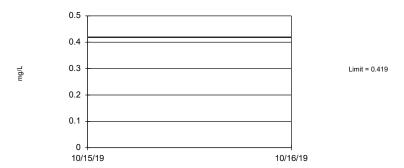
95% coverage. Background Data Summary (based on square root transformation): Mean=0.4625, Std. Dev.=0.1358, n=83. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9794, critical = 0.96. Report alpha = 0.05.

Constituent: Fluoride Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

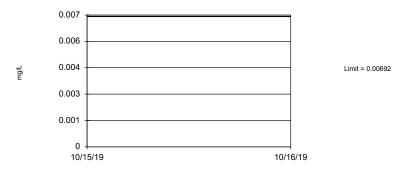
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.5. Report alpha = 0.01738.

Tolerance Limit Interwell Non-parametric



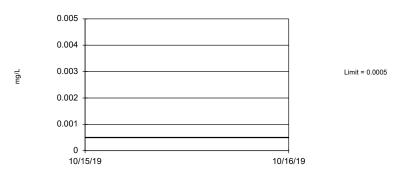
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 96.2% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Lead Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

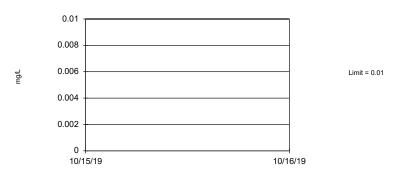
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha=0.01738.

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit Interwell Non-parametric



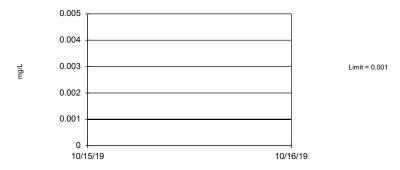
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Molybdenum Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit Interwell Non-parametric

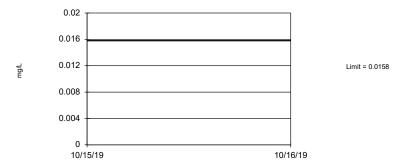


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 96.2% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Thallium Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV
Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 78 background values. 66.67% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

Constituent: Selenium Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE H.

GORGAS (SYPSUM	POND GWPS	
Analyte	Units	Background	GWPS
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.01531	2
Beryllium	mg/L	0.0121	0.004
Cadmium	mg/L	0.00598	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	1.07	1.07
Combined Radium-226/228	pCi/L	1.151	5
Fluoride	mg/L	0.5302	4
Lead	mg/L	0.00692	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01	0.1
Selenium	mg/L	0.0158	0.05
Thallium	mg/L	0.001	0.002

Notes:

- 1. mg/L Milligrams per liter
- 2. pCi/L Picocuries per liter
- 3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
- 4. GWPS established during second semi-annual sampling event in 2019.

FIGURE I.

Confidence Intervals Summary Table - Significant Results

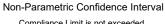
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/19/2020, 4:37 PM

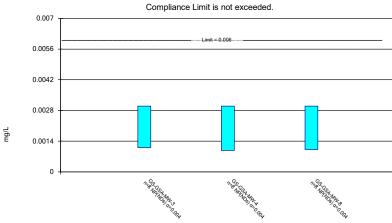
 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Compliance Sig. N
 Mean
 Std. Dev.
 %NDs ND Adj.
 Transform Alpha
 Method

 Lithium (mg/L)
 GS-GSA-MW-3
 0.498
 0.435
 0.419
 Yes 8
 0.4665
 0.02975
 0
 None
 No
 0.0
 Param.

Confidence Intervals Summary Table - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 10/19/2020, 4:37 PM Constituent <u>Well</u> Upper Lim. Lower Lim. Compliance Sig. N <u>Mean</u> Std. Dev. %NDs ND Adj. Transform Alpha Method Antimony (mg/L) GS-GSA-MW-3 0.003 0.00111 0.006 No 8 0.002764 0.0006682 87.5 None 0.004 NP (NDs) No Antimony (mg/L) GS-GSA-MW-4 0.003 0.000976 0.006 No 8 0.002747 0.0007156 87.5 None No 0.004 NP (NDs) GS-GSA-MW-8 0.003 0.00102 0.002753 0.0007 87.5 0.004 NP (NDs) Antimony (ma/L) 0.006 No 8 None No Arsenic (mg/L) GS-GSA-MW-3 0.005 0.00121 0.01 No 8 0.004526 0.00134 87.5 None No 0.004 NP (NDs) Arsenic (mg/L) GS-GSA-MW-4 0.005 0.00115 0.01 No 8 0.003174 0.001961 50 0.004 NP (normality) None No Barium (mg/L) GS-GSA-MW-3 0.01441 0.01186 2 No 8 0.01314 0.001203 0 None No 0.01 Param. Barium (mg/L) GS-GSA-MW-4 0.0143 0.01197 2 0.01314 0.01 Param. No 8 0.001099 0 None No Barium (mg/L) GS-GSA-MW-8 0.0254 0.02038 2 No 8 0.02289 0.002369 No 0.01 Param. 0.002393 Beryllium (mg/L) GS-GSA-MW-3 0.003328 0.001457 0.004 No 8 0.0008821 0 None Nο 0.01 Param. Beryllium (mg/L) GS-GSA-MW-4 0.005126 0.003787 No 8 0.004456 0.0006316 0 Param. Cadmium (mg/L) GS-GSA-MW-4 0.001451 No 8 0.001621 0.0001602 0 Param. 0.001791 0.005 None Nο 0.01 Cobalt (mg/L) GS-GSA-MW-3 0.1427 0.08399 1.07 No 8 0.1133 0.02768 0.01 Cobalt (mg/L) GS-GSA-MW-4 0.2335 0.1969 0.03451 0 0.1603 1.07 No 8 0.01 Param. None No Cobalt (mg/L) GS-GSA-MW-8 0.005 0.00492 0.00499 0.00002828 87.5 0.004 NP (NDs) Combined Radium 226 + 228 (pCi/L) GS-GSA-MW-3 0.7368 0.2857 5 No 8 0.5113 0.2128 0 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) GS-GSA-MW-4 0.925 5 No 8 0.5846 0.2658 0 No 0.004 NP (normality) Combined Radium 226 + 228 (pCi/L) 0.01 Param. GS-GSA-MW-8 0.8922 -0.001707 5 No 8 0.4453 0.4217 0 None Fluoride (mg/L) GS-GSA-MW-3 0.7312 0.4421 No 8 0.5866 0.1364 0 0.01 Param. None No 0.004 NP (normality) Fluoride (mg/L) GS-GSA-MW-4 0.7 0.1 No 8 0.32 0.2545 50 None No Fluoride (mg/L) GS-GSA-MW-8 0.1683 0.123 No 8 0.1456 0.02135 0 None No 0.01 Param. Lithium (mg/L) GS-GSA-MW-3 0.498 0.435 0.419 Yes 8 0.4665 0.02975 None No 0.01 Param. Lithium (mg/L) GS-GSA-MW-4 0.2854 0.2748 0.01007 0.01 Param. 0.2641 0.419 No 8 0 None No Lithium (mg/L) GS-GSA-MW-8 0.2068 0.1572 0.419 No 8 0.182 0.02343 No 0.01 Param. Selenium (mg/L) GS-GSA-MW-3 0.01 0.00234 0.05 0.007171 0.003905 0.004 NP (NDs) No 8 62.5 None No Selenium (mg/L) GS-GSA-MW-4 0.01 0.00298 0.05 0.006221 0.003199 None 0.004 NP (normality) Thallium (mg/L) GS-GSA-MW-4 0.001 0.000205 0.002 No 8 0.0009006 0.0002811 87.5 Nο 0.004 NP (NDs) None



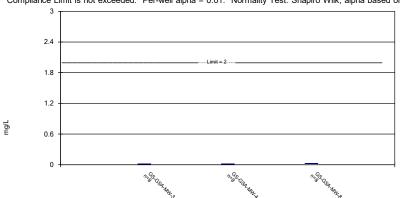


Constituent: Antimony Analysis Run 10/19/2020 4:33 PM View: Appendix IV Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

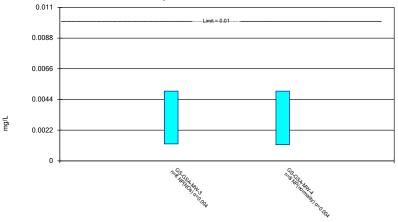




Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

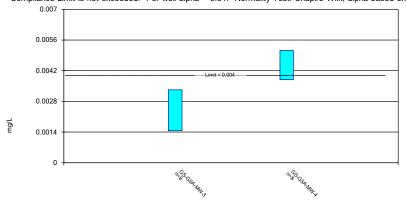


Constituent: Arsenic Analysis Run 10/19/2020 4:33 PM View: Appendix IV Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

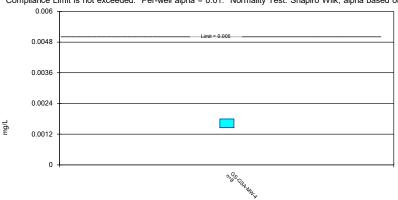
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

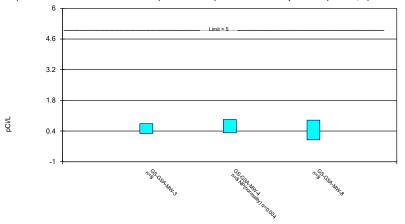


Constituent: Cadmium Analysis Run 10/19/2020 4:33 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



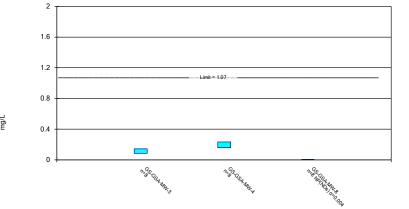
Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2020 4:33 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

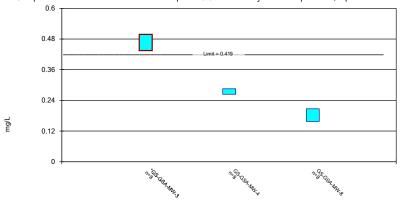


Constituent: Cobalt Analysis Run 10/19/2020 4:33 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

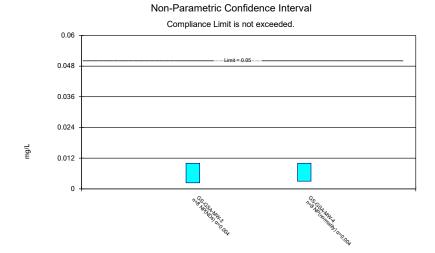
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

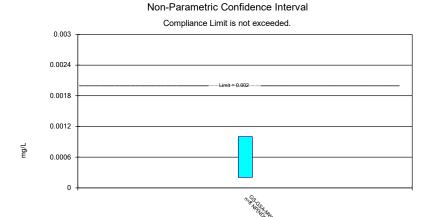


Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Constituent: Selenium Analysis Run 10/19/2020 4:33 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

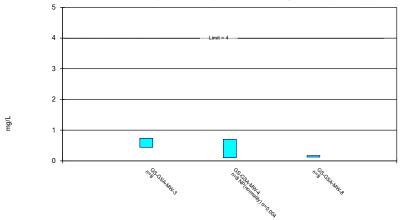
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Constituent: Thallium Analysis Run 10/19/2020 4:33 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 10/19/2020 4:35 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Appendix D

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: WMWGORG_1208TCLP

Project/Site: Gorgas Gypsum

Parrish, AL 35580

For: Southern Company Services

3535 Colonnade Parkway Birmingham, AL 35243

Attention: Dustin Brooks & Greg Dyer

Released By: Laura Midkiff

Ibmidkif@southernco.com

(205) 664-6197

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





TCLP Extraction

Gorgas Gypsum

WMWGORG_1208TCLP

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
AZ10368	645421	WMWGORG_1208TCLP

- 4. All of the above samples were prepared by EPA 1311 and WI 19200.
- 5. All samples were prepared within the established hold times.
- 6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Particle size reduction was not required.
- Percentage of dry solids was determined.
- pH meter was calibrated and verified. All acceptance criteria were met.
- pH of LCS buffer was performed. All acceptance criteria were met.
- Fluid used for extraction was within acceptable pH range.
- All samples were extracted with Fluid #1 per EPA 1311.
- Sample extraction time requirements were met.
- Room temperature requirements during extraction were met.
- Appropriate number of MS/MSD prepared per extraction fluids.
- Appropriate fluid blanks were prepared.
- Samples acidified to a pH of less than 2 after spiking for MS and MSD.
- Spiking was complete within 15 min of filtration.

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





Metals ICPMS

Gorgas Gypsum

WMWGORG_1208TCLP

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	<u>Batch ID</u>	Project ID
AZ10368	646017	WMWGORG_1208TCLP

- 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 TCLP method blank associated with the TCLP prep passed, except for the Barium.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

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



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.

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





Mercury

Gorgas Gypsum

WMWGORG_1208TCLP

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
AZ10368	645580	WMWGORG_1208TCLP

- 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.

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



Matrix Specific Quality Control Procedures

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.
- 7. All samples were analyzed without a dilution.
- 8. The raw data results are shown with dilution factors included.

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





To: Dustin Brooks Greg Dyer

Customer Account: WMWGORG Sample Date: 23-Apr-19

Customer ID:

Delivery Date: 24-Apr-19

Description: Gorgas Gypsum - G-1

Laboratory ID Number: AZ10368

Name	Analyst	Test Date	Reference	Vio Spec DF	MDL	RL	Q	Results	Units
Pesticides		,							
Date Extracted	RDA	5/1/2019	EPA 1311	1	DATE			05/01/2019	DATE
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/3/2019	EPA 200.8	5.075	0.001	0.005	J	0.00458	mg/L
* Barium, Total	DLJ	5/8/2019	EPA 200.8	5.075	0.002	0.01		0.0528	mg/L
* Cadmium, Total	DLJ	5/8/2019	EPA 200.8	5.075	0.0003	0.001	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/3/2019	EPA 200.8	5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/6/2019	EPA 245.1	1.01	0.000303	0.000505	J	0.000347	mg/L
* Lead, Total	DLJ	5/3/2019	EPA 200.8	5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/3/2019	EPA 200.8	5.075	0.002	0.01		0.0135	mg/L
General Characteristics									
TCLP Extraction Fluid#	RDA	5/2/2019	EPA 1311	1				1	
pH of Extraction Fluid	RDA	5/2/2019	EPA 1311	1		4.00		4.97	
Solids Content of Sample	RDA	5/2/2019	EPA 1311	1	0.01			100	%

Issued By: State of Florida, Department of Health Expiration: June 30, 2019

Comments: Barium results are qualified due to analyte was found at concentrations greater than the RL and greater than 1/10 the sample amounts in the TCLP method blank. LBM 5/24/19

> Reported: 6/6/2019 Version: 2.0

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

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





To: Dustin Brooks Greg Dyer

Customer Account: WMWGORG Sample Date: 23-Apr-19

Customer ID:

Delivery Date: 24-Apr-19

Description: Gorgas Gypsum - G-1

Laboratory ID Number: AZ10368

	1017 12 11011112011 71210000											
	-		MB					LCS		Rec		Prec
Sample	Analysis	Units MB	Limit	Spike	MS	MSD	LCS	Limit	Rec	Limit	Prec	Limit
AZ10368	Arsenic, Total	mg/L 0.000133	0.0022	0.10	0.103	0.0995	0.0972	0.085 to 0.115	98.4	70 to 130	3.40	20
AZ10368	Barium, Total	mg/L 0.0226	0.0044	0.10	0.125	0.144	0.0934	0.085 to 0.115	72.2	70 to 130	14.1	20
AZ10368	Cadmium, Total	mg/L 0.00000263	0.00066	0.10	0.0900	0.0927	0.0939	0.085 to 0.115	90.0	70 to 130	2.96	20
AZ10368	Chromium, Total	mg/L 0.000536	0.0044	0.10	0.0963	0.0953	0.0964	0.085 to 0.115	96.3	70 to 130	1.04	20
\Z10368	Mercury, Total by CVAA	mg/L 0.000293	0.0005	0.004	0.00342	0.00354	0.00413	0.0034 to 0.0046	76.8	70 to 130	3.33	20
AZ10368	Lead, Total	mg/L 0.000468	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	101	70 to 130	0.213	20
AZ10368	Selenium, Total	mg/L 0.000121	0.0044	0.10	0.110	0.108	0.0984	0.085 to 0.115	96.4	70 to 130	1.98	20
AZ10368	pH of Extraction Fluid						6.95	6.95 to 7.05	99.3	98 to 102		

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

Comments: Barium results are qualified due to analyte was found at concentrations greater than the RL and greater than 1/10 the sample amounts in the TCLP method blank. LBM 5/24/19

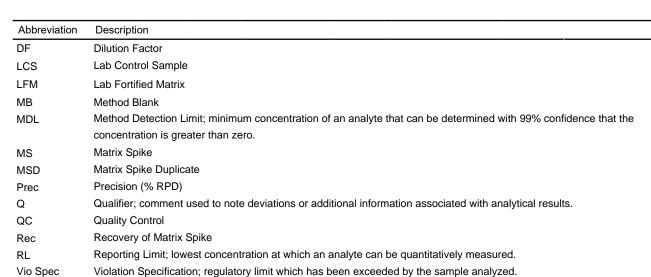
> Reported: 6/6/2019 Version: 2.0

^{*} 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

Definitions

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





Qualifier	Description
В	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.
С	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.
Н	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.
Р	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.
Т	Sample temperature is outside of specification limit.
U	Compound was analyzed, but not detected.

Chain of Custody Sample Analysis Request General Test Laboratory, G.S.C. 8





Dept. No. 40045 Site Representative Collector(s) Date Sampled V-23-19 Time 1400 AM PM Location of Sampling (Name of Facility, etc) Congas Gypsun Storage WMWGOLG 1208	requested Comple	tion Date Roules To: Gree Pyer E	xt
Site Representative Chey George Collector(s) Note: Date Sampled Y-23-19 Time 1400 AM PM Lacation of Sampling (Name of Facility, etc) Analyses Requested TCLP PCRAS (but no Ag) NMWGORG-1208 Special Handling and/or Storage Relinquished By Relinquished By Date/Time Date/Time Paceived By	(Explain)		
Collector(s) Collector(s) Conges Co		Dept. No. 4 004 D	
Date Sampled V-23-19 Location of Sampling (Name of Facility, etc) Corsos Gypsun Storage WMWGOLG 1208 Analyses Requested TCLP RCRAS (but no Aq) WMWGOLG 1208 Special Handling and/or Storage Refuseled to belos Gertry 0 4-23-19/1455 for tousent Date/Time Date/Time Date/Time Date/Time Date/Time W-23-11/1420 Sample No. Date/Time	Site Representative		
Analyses Requested TCLP & CRAS (but no Ag) WMWGOR G-ROSTCLE SPLP & CRAS (but no Ag) WMWGOR G-ROSTCLE Special Handling and/or Storage Relinquished By Date/Time 4-23-17 1420 Received By WMWGOR G-ROSTCLE WMWGOR G-ROSTCLE BY PReceived By Pate/Time 4-23-17 1420 Received By Sample No. Field Information (Sample Description, Date, Etc.) * Lab ID	Collector(s)	Date Sampled 0 Time	AM PM
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Sample No. Field Information (Sample Description, Date, Etc.) * Lab ID	Special Handling and/o	Relugueshed to belles Gentry 24-23-19/1455 for Louisont Dala	At 349
TCLP	Relinquished By	Par 123-17/1420 Received by Rally U	
G-1 Gypsur souple collected off of give a old Gypsum storage area @1400 A 210369 G-1 Gypsur sample collected off of give a old Gypsum storage area @1400 A 210369	Sample No.		* Lab ID
G-1 Gypsom sample collected off of give @ old Gypsom storage, area @1400 A 2 10369	G-1	Gypsun sample allected off of pile D Old Gysum strang area 2 1400	A 210 368
	G-1	Gypsum sample colleted off of pile @ old Gypsum storage area @1400	AZ10369
	<u> </u>		

^{*} For General Lab Use Only

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: WMWGORG_1208SPLP

Project/Site: Gorgas Gypsum

Parrish, AL 35580

For: Southern Company Services

3535 Colonnade Parkway Birmingham, AL 35243

Attention: Dustin Brooks & Greg Dyer

Released By: Laura Midkiff

Ibmidkif@southernco.com

(205) 807-2676

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





SPLP Extraction

Gorgas Gypsum

WMWGORG_1208SPLP

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
AZ10369	645425	WMWGORG_1208SPLP

- 4. All of the above samples were prepared by EPA 1312 and WI 19200.
- 5. All samples were prepared within the established hold times.
- 6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Particle size reduction was not required.
- Percentage of dry solids was determined.
- pH meter was calibrated and verified. All acceptance criteria were met.
- pH of LCS buffer was performed. All acceptance criteria were met.
- Fluid used for extraction was within acceptable pH range.
- All samples were extracted with Fluid #1 per EPA 1312.
- Sample extraction time requirements were met.
- Room temperature requirements during extraction were met.
- Appropriate number of MS/MSD prepared per extraction fluids.
- Appropriate fluid blanks were prepared.
- Samples acidified to a pH of less than 2 after spiking for MS and MSD.
- Spiking was complete within 15 min of filtration.

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





Metals ICPMS

Gorgas Gypsum

WMWGORG_1208SPLP

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
AZ10369	646199	WMWGORG_1208SPLP

- 4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
- 5. All samples were analyzed and prepared 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 SPLP method blank associated with the SPLP prep passed, except for the Barium.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

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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.

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





Mercury

Gorgas Gypsum

WMWGORG_1208SPLP

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
AZ10369	645581	WMWGORG_1208SPLP

- 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.

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



Matrix Specific Quality Control Procedures

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.
- 7. All samples were analyzed without a dilution.
- 8. The raw data results are shown with dilution factors included.

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





To: Dustin Brooks Greg Dyer

Customer Account: WMWGORG Sample Date: 23-Apr-19

Customer ID:

Delivery Date: 24-Apr-19

Description: Gorgas Gypsum - G-1

Laboratory ID Number: AZ10369

Name	Analyst	Test Date	Reference	Vio Spec DF	MDL	RL	Q	Results	Units
Pesticides									
Date Extracted	RDA	5/2/2019	EPA 1312	1	DATE			5/2/2019	DATE
Metals, Cyanide, Total Phenols									
Arsenic, Total	DLJ	5/3/2019	EPA 200.8	5.075	0.001	0.005	J	0.00136	mg/L
Barium, Total	DLJ	5/8/2019	EPA 200.8	5.075	0.002	0.01		0.0163	mg/L
* Cadmium, Total	DLJ	5/8/2019	EPA 200.8	5.075	0.0003	0.001	U	Not Detected	mg/L
Chromium, Total	DLJ	5/3/2019	EPA 200.8	5.075	0.002	0.01	U	Not Detected	mg/L
Mercury, Total by CVAA	ABB	5/6/2019	EPA 245.1	1.01	0.000303	0.000505	U	Not Detected	mg/L
Lead, Total	DLJ	5/3/2019	EPA 200.8	5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/3/2019	EPA 200.8	5.075	0.002	0.01	U	Not Detected	mg/L
General Characteristics									
SPLP Extraction Fluid#	RDA	5/2/2019	EPA 1312	1				1	
pH of Extraction Fluid	RDA	5/2/2019	EPA 1312	1		4.00		4.25	
Solids Content of Sample	RDA	5/2/2019	EPA 1312	1	0.01			100	%

Issued By: State of Florida, Department of Health Expiration: June 30, 2019

Comments: Barium results are qualified due to analyte was found at concentrations greater than the RL and greater than 1/10 the sample amounts in the SPLP method blank. LBM 5/24/19

> Reported: 6/6/2019 Version: 2.0

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

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





To: Dustin Brooks Greg Dyer

Customer Account: WMWGORG Sample Date: 23-Apr-19

Customer ID:

Delivery Date: 24-Apr-19

Description: Gorgas Gypsum - G-1

Laboratory ID Number: AZ10369

	<u>′</u>										
		MB					LCS		Rec		Prec
Sample Analysis	Units MB	Limit	Spike	MS	MSD	LCS	Limit	Rec	Limit	Prec	Limit
Z10369 Arsenic, Total	mg/L 0.000570	0.0022	0.10	0.0985	0.0970	0.0969	0.085 to 0.115	97.1	70 to 130	1.54	20
AZ10369 Barium, Total	mg/L 0.00573	0.0044	0.10	0.111	0.106	0.0921	0.085 to 0.115	94.2	70 to 130	3.92	20
AZ10369 Cadmium, Total	mg/L 0.00000145	0.00066	0.10	0.0914	0.0884	0.0900	0.085 to 0.115	91.4	70 to 130	3.32	20
Z10369 Chromium, Total	mg/L 0.000147	0.0044	0.10	0.0948	0.0954	0.0966	0.085 to 0.115	94.8	70 to 130	0.560	20
AZ10369 Mercury, Total by CVAA	mg/L 0.000199	0.0005	0.004	0.00303	0.00309	0.00403	0.0034 to 0.0046	75.7	70 to 130	2.07	20
AZ10369 Lead, Total	mg/L 0.0000142	0.0022	0.10	0.100	0.100	0.105	0.085 to 0.115	100	70 to 130	0.138	20
AZ10369 Selenium, Total	mg/L 0.000189	0.0044	0.10	0.0943	0.0939	0.0999	0.085 to 0.115	94.3	70 to 130	0.472	20
AZ10369 pH of Extraction Fluid						7.01	6.95 to 7.05	100	98 to 102		

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

Comments: Barium results are qualified due to analyte was found at concentrations greater than the RL and greater than 1/10 the sample amounts in the SPLP method blank. LBM 5/24/19

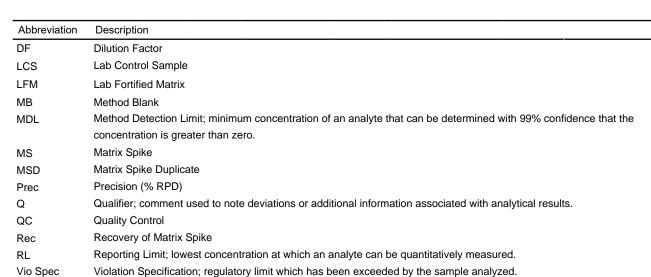
> Reported: 6/6/2019 Version: 2.0

^{*} 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

Definitions

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





Qualifier	Description
В	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.
С	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.
Н	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.
Р	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.
Т	Sample temperature is outside of specification limit.
U	Compound was analyzed, but not detected.

Chain of Custody Sample Analysis Request General Test Laboratory, G.S.C. 8





Dept. No. 40045 Site Representative Collector(s) Date Sampled V-23-19 Time 1400 AM PM Location of Sampling (Name of Facility, etc) Congas Gypsun Storage WMWGOLG 1208	requested Comple	tion Date Roules To: Gree Pyer E	xt
Site Representative Chey George Collector(s) Note: Date Sampled Y-23-19 Time 1400 AM PM Lacation of Sampling (Name of Facility, etc) Analyses Requested TCLP PCRAS (but no Ag) NMWGORG-1208 Special Handling and/or Storage Relinquished By Relinquished By Date/Time Date/Time Paceived By	(Explain)		
Collector(s) Collector(s) Conges Co		Dept. No. 4 004 D	
Date Sampled V-23-19 Location of Sampling (Name of Facility, etc) Corsos Gypsun Storage WMWGOLG 1208 Analyses Requested TCLP RCRAS (but no Aq) WMWGOLG 1208 Special Handling and/or Storage Refuseled to belos Gertry 0 4-23-19/1455 for tousent Date/Time Date/Time Date/Time Date/Time Date/Time W-23-11/1420 Sample No. Date/Time	Site Representative		
Analyses Requested TCLP & CRAS (but no Ag) WMWGOR G-ROSTCLE SPLP & CRAS (but no Ag) WMWGOR G-ROSTCLE Special Handling and/or Storage Relinquished By Date/Time 4-23-17 1420 Received By WMWGOR G-ROSTCLE WMWGOR G-ROSTCLE BY PReceived By Pate/Time 4-23-17 1420 Received By Sample No. Field Information (Sample Description, Date, Etc.) * Lab ID	Collector(s)	Date Sampled 0 Time	AM PM
Special Handling and/or Storage Special Handling and/or Storage Relayesked to belos Getry 2 4-23-19/1455 for tousoft 2 24/2 Relinquished By Date/Time 4-23-11/1420 Sample No. Field Information (Sample Description, Date, Etc.) *Lab ID Lab ID	Location of Sampling (N	Jame of Facility, etc) Gossos Gussun Storac MMWGOR	G-1208
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Sample No. Field Information (Sample Description, Date, Etc.) * Lab ID	Special Handling and/o	Relugueshed to belles Gentry 24-23-19/1455 for Louisont Dala	At 348
TCLP	Relinquished By	Par 123-17/1420 Received by Rally U	
G-1 Gypsur souple collected off of give a old Gypsum storage area @1400 A 210369 G-1 Gypsur sample collected off of give a old Gypsum storage area @1400 A 210369	Sample No.		* Lab ID
G-1 Gypsom sample collected off of give @ old Gypsom storage, area @1400 A 2 10369	G-1	Gypsun sample allected off of pile D Old Gysum strang area 2 1400	A 210 368
	G-1	Gypsum sample colleted off of pile @ old Gypsum storage area @1400	AZ10369
	<u> </u>		
			-

^{*} For General Lab Use Only

Appendix E

MNA Sampling Field Data

Well ID	рН	ORP (mV)	Conductivity (μS/cm)	DO (mg/L)	Temperature (°C)	Turbidity (NTU)	Depth to Water (feet)
MW-1	5.13	96	2541.6	0.86	18.97	0.22	91.4
MW-2	6.16	36.3	1694	0.26	18.52	0.47	81.8
MW-3	5.63	127.2	3809.1	6.14	17.14	1.81	104.45
MW-4	6.42	92.3	3170.5	4.9	20.42	0.64	115.18
GS-GSA-MW-3	5.87	0.7	4538.7	0.14	18.81	6.53	102.82
GS-GSA-MW-4	3.82	185.6	1274.5	0.17	19.27	5.11	87.4

Analytical Report



Sample Group: WMWGORG_1262

Project/Site: Gorgas Gypsum

Parrish, AL 35580

For: Southern Company Services

3535 Colonnade Parkway Birmingham, AL 35243

Attention: Brooks, Dyer, Redwine, Mitchell, & Vlassopoulos

Released By: Laura Midkiff

lbmidkif@southernco.com

(205) 664-6197



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

March 18, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on February 14, 2020. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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

Sincerely,

Quality Control: Laura Midkiff On ton Laura Midkiff

Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Powe
Company, ou=Environmental Affairs,
email=lbmidkif@southernco.com, c=US
Date: 2020 03 18 13:51:34 -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





This Certificate states the physical and/or chemical characteristics of the sample as submitted.

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Alabama Power's General Test Laboratory.



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



Total Metals ICP

Gorgas Gypsum

WMWGORG 1262

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03151	666624	WMWGORG_1262
BA03152	666624	WMWGORG_1262
BA03153	666624	WMWGORG_1262
BA03154	666624	WMWGORG_1262
BA03155	666624	WMWGORG_1262

- 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.

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



Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
- 7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	<u>Analyte</u>	<u>Dilution factor</u>
BA03151	Calcium, Iron, Magnesium, Sodium	101.5
BA03152	Calcium, Iron, Magnesium, Silicon	10.15
BA03153	Calcium, Iron, Magnesium, Silicon	10.15

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

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



Dissolved Metals ICP

Gorgas Gypsum

WMWGORG 1262

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	<u>Project ID</u>
BA03151	666435	WMWGORG_1262
BA03152	666435	WMWGORG_1262
BA03153	666435	WMWGORG_1262

- 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.

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



Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
 - o BA03153 MS/MSD spike level for iron was less than 30% of the sample nominal concentration.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.
- 7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	<u>Analyte</u>	<u>Dilution factor</u>
BA03151	Iron	101.5
BA03152	Iron	10.15
BA03153	Iron	10.15

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

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



Total Metals ICPMS

Gorgas Gypsum

WMWGORG 1262

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03151	666791	WMWGORG_1262
BA03152	666791	WMWGORG_1262
BA03153	666791	WMWGORG_1262
BA03154	666791	WMWGORG_1262
BA03155	666791	WMWGORG_1262

- 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.

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



Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.
- 7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	<u>Analyte</u>	<u>Dilution factor</u>
BA03151	Manganese	92.365
BA03152	Manganese & Aluminum	10.15
BA03153	Manganese & Aluminum	10.15

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

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



Dissolved Metals ICPMS

Gorgas Gypsum

WMWGORG 1262

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03151	666680	WMWGORG_1262
BA03152	666680	WMWGORG_1262
BA03153	666680	WMWGORG_1262

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

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.

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



Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
 - o BA03153 MS/MSD spike levels for Mn and Al were <30% of the sample nominal concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.
- 7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	<u>Analyte</u>	Dilution factor
BA03151	Manganese	92.365
BA03152	Manganese & Aluminum	10.15
BA03153	Manganese & Aluminum	10.15

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

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



Anions

Gorgas Gypsum

WMWGORG_1262

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03151	666415, 666417, & 666718	WMWGORG_1262
BA03152	666415, 666417, & 666718	WMWGORG_1262
BA03153	666415, 666417, & 666718	WMWGORG_1262
BA03154	666415, 666417, & 666718	WMWGORG_1262
BA03155	666415, 666417, & 666718	WMWGORG_1262

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

General Quality Control Procedures:

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

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



Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met.
- 7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	<u>Analyte</u>	Dilution factor
BA03151	Chloride & Sulfate	16 & 160
BA03152	Chloride & Sulfate	4 & 100
BA03153	Chloride & Sulfate	4 & 100

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

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



Alkalinity

Gorgas Gypsum

WMWGORG 1262

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	<u>Project ID</u>
BA03151	667554 & 667555	WMWGORG_1262
BA03152	667554 & 667555	WMWGORG_1262
BA03153	667554 & 667555	WMWGORG_1262

- 4. All of the above samples were analyzed by Standard Method 2320B, except for the following:
 - a. BA03152 & BA03153 had a starting pH below the 4.2 titration limit. Therefore, Alkalinity could not be performed.
- 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 not analyzed due to the sample chosen as the QC point had a starting pH below 4.2.

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



Total Organic Carbon by High Temperature Combustion

Gorgas Gypsum

WMWGORG 1262

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03151	667004	WMWGORG_1262
BA03152	667004	WMWGORG_1262
BA03153	667004	WMWGORG_1262
BA03154	667004	WMWGORG_1262
BA03155	667004	WMWGORG_1262

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

General Quality Control Procedures:

- All calibration criteria was met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were <1/2RL.
- All continued calibration verification (CCV) were within the acceptance range.
- All continued calibration blanks (CCB) were <1/2RL.
- Matrix Specific QC:
 - A sample duplicate was run and criteria for precision was met.
 - o A matrix spike was run and criteria for accuracy was met.
- 7. All samples were analyzed without a dilution factor.

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



Nitrate/Nitrite, Nitrite, and ortho-Phosphate

Gorgas Gypsum

WMWGORG 1262

- 1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
- 2. Refer to comments on Chain of Custody for information regarding sample receipt.
- 3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03151	666402, 666400, & 666404	WMWGORG_1262
BA03152	666402, 666400, & 666404	WMWGORG_1262
BA03153	666402, 666400, & 666404	WMWGORG_1262
BA03154	666402, 666400, & 666404	WMWGORG_1262
BA03155	666402, 666400, & 666404	WMWGORG_1262

- 4. All of the above samples were analyzed by NO_x and NO₂ by EPA 353.2 and PO₄ by SM 4500P-F.
- 5. All samples were prepared and analyzed within the established hold times.
- 6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

EPA 353.2 Specific QC:

- For NO_x: Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.
- Matrix Specific QC:
 - A sample duplicate was run and criteria for precision was met.
 - o A matrix spike was run and criteria for accuracy was met.

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



SM 4500P-F Specific QC:

- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below half the limit of quantitation.
- All continued calibration blanks (CCB) were below half the limit of quantitation.
- Matrix Specific QC:
 - o A matrix spike was run and criteria for accuracy was met.
 - o A matrix spike duplicate was run and criteria for precision was met.
- 7. All samples were analyzed without a dilution factor.
- 8. The raw data results are shown with dilution factors included.

Certificate Of Analysis



Description: Gorgas Gypsum - GS-GSA-MW-3Location Code:WMWGORGCollected:2/13/20 13:20

Customer ID:

Laboratory ID Number: BA03151 Submittal Date: 2/14/20 09:17

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Pre	paration Method:	EPA 1638		
* Boron, Total	2/18/20 15:15	2/19/20 12:4	6 1.015	2.63	mg/L	0.03	0.1	
* Calcium, Total	2/18/20 15:15	2/19/20 14:0	6 101.5	5 516	mg/L	10.15	50.75	
Silicon, Total	2/18/20 15:15	2/19/20 12:4	6 1.015	10.5	mg/L	0.03	0.3	
* Iron, Total	2/18/20 15:15	2/19/20 14:0	6 101.5	202	mg/L	2.03	5.075	
* Lithium, Total	2/18/20 15:15	2/19/20 12:4	6 1.015	0.376	mg/L	0.01	0.02	
* Magnesium, Total	2/18/20 15:15	2/19/20 14:0	6 101.5	314	mg/L	10.15	50.75	
Silica, Total (calc.)	2/18/20 15:15	2/19/20 12:4	6 1	22.5	mg/L			
* Sodium, Total	2/18/20 15:15	2/19/20 14:0	6 101.5	185	mg/L	10.15	50.75	
Analytical Method: EPA 200.7	Anal	yst: RDA						
* Iron, Dissolved	2/17/20 08:30	2/17/20 12:2	4 101.5	210	mg/L	2.03	5.075	
Analytical Method: EPA 200.8	Anal	yst: DLJ		Pre	paration Method:	EPA 1638		
* Antimony, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	Not Dete	cted mg/L	0.0008	0.003	U
* Arsenic, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	0.00106	mg/L	0.001	0.005	J
* Aluminum, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	0.177	mg/L	0.02	0.06	
* Barium, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	0.0136	mg/L	0.002	0.01	
* Beryllium, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	0.00154	mg/L	0.0006	0.003	J
* Cadmium, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	Not Dete	cted mg/L	0.0003	0.001	U
* Chromium, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	Not Dete	cted mg/L	0.002	0.01	U
* Cobalt, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	0.0720	mg/L	0.002	0.005	
* Lead, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	Not Dete	cted mg/L	0.001	0.005	U
* Molybdenum, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	Not Dete	cted mg/L	0.002	0.01	U
* Manganese, Total	2/14/20 10:47	2/14/20 17:2	8 92.36	65 40.1	mg/L	0.092365	0.461825	
 Potassium, Total 	2/14/20 10:47	2/14/20 17:0	6 1.015	9.77	mg/L	0.3	2.5	
* Selenium, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	Not Dete	cted mg/L	0.002	0.01	U
∗ Thallium, Total	2/14/20 10:47	2/14/20 17:0	6 1.015	Not Dete	cted mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ						
* Antimony, Dissolved	2/14/20 11:21	2/14/20 12:3	0 1.015	Not Dete	cted mg/L	0.0008	0.003	U
* Aluminum, Dissolved	2/14/20 11:21	2/14/20 12:3	0 1.015	0.0461	mg/L	0.02	0.06	J
* Arsenic, Dissolved	2/14/20 11:21	2/14/20 12:3	0 1.015	0.00106	mg/L	0.001	0.005	J
* Beryllium, Dissolved	2/14/20 11:21				mg/L	0.0006	0.003	J

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

Certificate Of Analysis



Description: Gorgas Gypsum - GS-GSA-MW-3Location Code:WMWGORGCollected:2/13/20 13:20

Customer ID:

Laboratory ID Number: BA03151 Submittal Date: 2/14/20 09:17

	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Cadmium, Dissolved	2/14/20 11:21	2/14/20 12:3	30	1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	2/14/20 11:21	2/14/20 12:3	30	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	2/14/20 11:21	2/14/20 12:3	30	1.015	0.0711	mg/L	0.002	0.005	
* Lead, Dissolved	2/14/20 11:21	2/14/20 12:3	30	1.015	Not Detected	mg/L	0.001	0.005	U
Molybdenum, Dissolved	2/14/20 11:21	2/14/20 12:3	30	1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Dissolved	2/14/20 11:21	2/14/20 13:3	39	92.365	40.6	mg/L	0.092365	0.461825	
* Selenium, Dissolved	2/14/20 11:21	2/14/20 12:3	30	1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Dissolved	2/14/20 11:21	2/14/20 12:3	30	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2	Analy	yst: CES							
Nitrogen, Nitrate/Nitrite	2/14/20 12:34	2/14/20 12:3	34	1	0.389	mg/L as N	0.20	0.3	
Nitrogen, Nitrate (calc.)	2/14/20 13:04	2/14/20 13:0)4	1	0.389	mg/L as N			
Nitrogen, Nitrite	2/14/20 13:04	2/14/20 13:0	04	1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	Analy	yst: JAG							
Alkalinity, Total as CaCO3	2/24/20 13:30	2/24/20 13:4	10	1	152	mg/L		0.1	
Analytical Method: SM 4500CO2 D	Analy	yst: JAG							
Bicarbonate Alkalinity, (calc.)	2/24/20 13:30	2/24/20 13:4	10	1	152	mg/L			
Carbonate Alkalinity, (calc.)	2/24/20 13:30	2/24/20 13:4	10	1	0.01	mg/L			
Analytical Method: SM 4500PF-OP	Analy	yst: CES							
Ortho Phosphate	2/14/20 13:38	2/14/20 13:3	38	1	0.013	mg/L as P	0.010	0.03	J
Analytical Method: SM 5310 B	Analy	yst: HRG							
* Total Organic Carbon	2/20/20 14:03	2/20/20 14:0	03	1	1.08	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	Analy	yst: JCC							
* Chloride	2/14/20 12:11	2/14/20 12:1	11	16	245	mg/L	8.00	16	
Analytical Method: SM4500F G 2017	Analy	yst: JCC							
* Fluoride	2/14/20 15:51	2/14/20 15:5	51	1	0.477	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E		yst: JCC							
* Sulfate	2/17/20 16:38		38	160	2810	mg/L	80.00	160	

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/13/20 13:20

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-3

Laboratory ID Number: BA03151

	ideory is realised.			MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155	Sodium, Total	mg/L	0.00864	0.044	5.00	5.14	5.07	5.13	4.25 to 5.75	103	70 to 130	1.37	20
BA03155	Calcium, Total	mg/L	0.00945	0.1518	5.00	5.18	5.08	5.13	4.25 to 5.75	104	70 to 130	1.95	20
BA03155	Potassium, Total	mg/L	-0.0179	0.3674	10.0	9.93	9.95	9.93	8.5 to 11.5	99.3	70 to 130	0.201	20
BA03155	Beryllium, Total	mg/L	0.0000157	0.00088	0.10	0.0934	0.0922	0.0939	0.085 to 0.115	93.4	70 to 130	1.29	20
BA03155	Manganese, Total	mg/L	0.0000559	0.0001474	0.10	0.0985	0.0991	0.0994	0.085 to 0.115	98.5	70 to 130	0.607	20
BA03155	Selenium, Total	mg/L	0.0000707	0.00066	0.10	0.0972	0.0970	0.0980	0.085 to 0.115	97.2	70 to 130	0.206	20
BA03155	Silicon, Total	mg/L	-0.00207	0.044	1.00	1.04	1.02	1.02	0.850 to 1.15	104	70 to 130	1.94	20
BA03153	Aluminum, Dissolved	mg/L	0.0000657	0.0088	0.10	10.7	10.5	0.0990	0.085 to 0.115	600	70 to 130	1.89	20
BA03153	Arsenic, Dissolved	mg/L	-0.00000084	0.0001474	0.10	0.102	0.0958	0.103	0.085 to 0.115	101	70 to 130	6.27	20
BA03153	Cadmium, Dissolved	mg/L	-0.00000014	0.0001474	0.10	0.0938	0.0911	0.0972	0.085 to 0.115	92.1	70 to 130	2.92	20
BA03153	Cobalt, Dissolved	mg/L	-0.00000176	0.0001474	0.10	0.330	0.322	0.0978	0.085 to 0.115	97.0	70 to 130	2.45	20
BA03153	Molybdenum, Dissolved	mg/L	0.00000579	0.0001474	0.10	0.0822	0.0820	0.0970	0.085 to 0.115	82.2	70 to 130	0.244	20
BA03155	Cadmium, Total	mg/L	-0.00000398	0.0001474	0.10	0.0955	0.0958	0.0972	0.085 to 0.115	95.5	70 to 130	0.314	20
BA03155	Lithium, Total	mg/L	0.0000591	0.0154	0.20	0.196	0.195	0.195	0.17 to 0.23	98.0	70 to 130	0.512	20
BA03155	Thallium, Total	mg/L	0.00000251	0.0001474	0.10	0.0961	0.0979	0.0967	0.085 to 0.115	96.1	70 to 130	1.86	20
BA03153	Beryllium, Dissolved	mg/L	0.0000179	0.00088	0.10	0.0955	0.0913	0.0922	0.085 to 0.115	91.2	70 to 130	4.50	20
BA03153	Manganese, Dissolved	mg/L	0.0000199	0.0001474	0.10	10.7	10.6	0.0994	0.085 to 0.115	600	70 to 130	0.939	20
BA03155	Arsenic, Total	mg/L	-0.00000048	0.0001474	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.00	20
BA03155	Total Organic Carbon	mg/L	0.510	1.00	10.0	8.72	8.65	9.38	9 to 11	87.2	80 to 120	0.806	20
BA03153	Iron, Dissolved	mg/L	0.000151	0.0176	0.2	12.3	12.6	0.204	0.17 to 0.23	-100	70 to 130	2.41	20
BA03153	Lead, Dissolved	mg/L	0.00000362	0.0001474	0.10	0.0975	0.0919	0.100	0.085 to 0.115	97.5	70 to 130	5.91	20
BA03153	Antimony, Dissolved	mg/L	0.000203	0.00066	0.10	0.0882	0.0890	0.0904	0.085 to 0.115	88.2	70 to 130	0.903	20
BA03155	Aluminum, Total	mg/L	0.000664	0.0088	0.10	0.0983	0.100	0.0977	0.085 to 0.115	98.3	70 to 130	1.71	20
BA03155	Barium, Total	mg/L	0.00000312	0.0002	0.10	0.0985	0.0966	0.0994	0.085 to 0.115	98.5	70 to 130	1.95	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/13/20 13:20

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-3

Laboratory ID Number: BA03151

_			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155 Iron, Total	mg/L	0.000675	0.0176	0.2	0.208	0.205	0.207	0.17 to 0.23	104	70 to 130	1.45	20
BA03155 Magnesium, Total	mg/L	-0.00133	0.0462	5.00	5.17	5.07	5.13	4.25 to 5.75	103	70 to 130	1.95	20
BA03155 Molybdenum, Total	mg/L	0.0000146	0.0001474	0.10	0.0977	0.0971	0.0969	0.085 to 0.115	97.7	70 to 130	0.616	20
BA03155 Boron, Total	mg/L	-0.000835	0.0650254	1.00	1.04	1.02	1.02	0.85 to 1.15	104	70 to 130	1.94	20
BA03155 Chromium, Total	mg/L	0.0000925	0.00044	0.10	0.0994	0.0982	0.0999	0.085 to 0.115	99.4	70 to 130	1.21	20
BA03155 Antimony, Total	mg/L	0.000277	0.00066	0.10	0.0916	0.0929	0.0929	0.085 to 0.115	91.6	70 to 130	1.41	20
BA03153 Chromium, Dissolved	mg/L	-0.0000212	0.00044	0.10	0.0818	0.0775	0.0992	0.085 to 0.115	81.8	70 to 130	5.40	20
BA03153 Selenium, Dissolved	mg/L	0.0000522	0.00066	0.10	0.0861	0.0835	0.0976	0.085 to 0.115	82.8	70 to 130	3.07	20
BA03153 Thallium, Dissolved	mg/L	-0.00000072	0.0001474	0.10	0.0932	0.0882	0.0934	0.085 to 0.115	93.2	70 to 130	5.51	20
BA03155 Ortho Phosphate	mg/L as P	0.001	0.015	0.250	0.239	0.242	0.244	0.225 to 0.275	95.6	80 to 120	1.25	10
BA03155 Cobalt, Total	mg/L	0.00000003	0.0001474	0.10	0.0953	0.0963	0.0972	0.085 to 0.115	95.3	70 to 130	1.04	20
BA03155 Lead, Total	mg/L	0.00000137	0.0001474	0.10	0.101	0.102	0.0998	0.085 to 0.115	101	70 to 130	0.985	20

Batch QC Summary



Customer Account: WMWGORG Sample Date: 2/13/20 13:20

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-3

Laboratory ID Number: BA03151

			MB			Sample		Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155 Sulfate	mg/L	-0.419	0.50	20.0	18.3	-0.837	18.5	18 to 22	91.5	80 to 120	0.00	20
BA03155 Chloride	mg/L	-0.034	0.50	10.0	10.1	0.0918	10.2	9 to 11	101	80 to 120	0.00	20
BA03155 Nitrogen, Nitrite	mg/L as N	0.002	0.20	0.50	0.547	0.001	0.779	0.675 to 0.825	109	90 to 110	0.00	15
BA03153 Alkalinity, Total as CaCO3	mg/L					NA	49.8	45.0 to 55.0			NA	10
BA03155 Fluoride	mg/L	0.0245	0.05	2.50	2.51	0.0155	2.54	2.25 to 2.75	100	80 to 120	0.00	20
BA03155 Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.20	2.00	2.00	0.035	1.98	1.8 to 2.2	100	90 to 110	0.00	15

Certificate Of Analysis



Description: Gorgas Gypsum - GS-GSA-MW-4Location Code:WMWGORGCollected:2/13/20 11:30

Customer ID:

Laboratory ID Number: BA03152 Submittal Date: 2/14/20 09:17

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method: EP	A 1638		
* Boron, Total	2/18/20 15:15	2/19/20 12:4	i9 1	.015	2.72	mg/L	0.03	0.1	
* Calcium, Total	2/18/20 15:15	2/19/20 14:0	9 1	0.15	99.0	mg/L	1.015	5.075	
Silicon, Total	2/18/20 15:15	2/19/20 14:0)9 1	0.15	21.8	mg/L	0.3045	3.045	
* Iron, Total	2/18/20 15:15	2/19/20 14:0	9 1	0.15	12.6	mg/L	0.203	0.5075	
* Lithium, Total	2/18/20 15:15	2/19/20 12:4	l9 1	.015	0.300	mg/L	0.01	0.02	
* Magnesium, Total	2/18/20 15:15	2/19/20 14:0	9 1	0.15	85.9	mg/L	1.015	5.075	
Silica, Total (calc.)	2/18/20 15:15	2/19/20 14:0	9 1		46.7	mg/L			
* Sodium, Total	2/18/20 15:15	2/19/20 12:4	l9 1	.015	16.2	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	Anal	yst: RDA							
* Iron, Dissolved	2/17/20 08:30	2/17/20 12:2	27 1	0.15	12.3	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method: EPA	A 1638		
* Antimony, Total	2/14/20 10:47	2/14/20 17:0	9 1	.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/14/20 10:47	2/14/20 17:0	9 1	.015	0.00130	mg/L	0.001	0.005	J
* Aluminum, Total	2/14/20 10:47	2/14/20 17:3	30 1	0.15	10.8	mg/L	0.203	0.609	
* Barium, Total	2/14/20 10:47	2/14/20 17:0	9 1	.015	0.0122	mg/L	0.002	0.01	
* Beryllium, Total	2/14/20 10:47	2/14/20 17:0	9 1	.015	0.00443	mg/L	0.0006	0.003	
* Cadmium, Total	2/14/20 10:47	2/14/20 17:0)9 1	.015	0.00160	mg/L	0.0003	0.001	
* Chromium, Total	2/14/20 10:47	2/14/20 17:0)9 1	.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/14/20 10:47	2/14/20 17:0	9 1	.015	0.231	mg/L	0.002	0.005	
* Lead, Total	2/14/20 10:47	2/14/20 17:0	9 1	.015	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	2/14/20 10:47	2/14/20 17:0	9 1	.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	2/14/20 10:47	2/14/20 17:3	30 1	0.15	10.8	mg/L	0.01015	0.05075	
* Potassium, Total	2/14/20 10:47	2/14/20 17:0	9 1	.015	4.31	mg/L	0.3	2.5	
* Selenium, Total	2/14/20 10:47	2/14/20 17:0	9 1	.015	0.00339	mg/L	0.002	0.01	J
* Thallium, Total	2/14/20 10:47	2/14/20 17:0)9 1	.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	Anal	yst: DLJ							
* Antimony, Dissolved	2/14/20 11:21	2/14/20 12:3	3 1	.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Dissolved	2/14/20 11:21	2/14/20 13:4	1 1	0.15	10.5	mg/L	0.203	0.609	
* Arsenic, Dissolved	2/14/20 11:21	2/14/20 12:3	33 1	.015	0.00133	mg/L	0.001	0.005	J
* Beryllium, Dissolved	2/14/20 11:21			.015	0.00432	mg/L	0.0006	0.003	

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

Certificate Of Analysis



Description: Gorgas Gypsum - GS-GSA-MW-4Location Code:WMWGORGCollected:2/13/20 11:30

Customer ID:

Submittal Date: 2/14/20 09:17

Laboratory ID Number: BA03152

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Cadmium, Dissolved	2/14/20 11:21	2/14/20 12:3	33 1	1.015	0.00170	mg/L	0.0003	0.001	
* Chromium, Dissolved	2/14/20 11:21	2/14/20 12:3	33 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	2/14/20 11:21	2/14/20 12:3	33 1	1.015	0.238	mg/L	0.002	0.005	
* Lead, Dissolved	2/14/20 11:21	2/14/20 12:3	33 1	1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	2/14/20 11:21	2/14/20 12:3	33 1	1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Dissolved	2/14/20 11:21	2/14/20 13:4	l1 1	10.15	10.5	mg/L	0.01015	0.05075	
* Selenium, Dissolved	2/14/20 11:21	2/14/20 12:3	33 1	1.015	0.00339	mg/L	0.002	0.01	J
* Thallium, Dissolved	2/14/20 11:21	2/14/20 12:3	33 1	1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2	Anal	yst: CES							
* Nitrogen, Nitrate/Nitrite	2/14/20 12:35	2/14/20 12:3	35 1	l	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/14/20 13:05	2/14/20 13:0)5 1		Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/14/20 13:05	2/14/20 13:0)5 1	l	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	Anal	yst: JAG							
Alkalinity, Total as CaCO3	2/24/20 13:30	2/24/20 13:4	10 1	l	NA	mg/L		0.1	
Analytical Method: SM 4500CO2 D	Anal	yst: JAG							
Bicarbonate Alkalinity, (calc.)	2/24/20 13:30	2/24/20 13:4	10 1	l	NA	mg/L			
Carbonate Alkalinity, (calc.)	2/24/20 13:30	2/24/20 13:4	10 1	l	NA	mg/L			
Analytical Method: SM 4500PF-OP	Anal	yst: CES							
Ortho Phosphate	2/14/20 13:39	2/14/20 13:3	39 1		Not Detected	mg/L as P	0.010	0.03	U
Analytical Method: SM 5310 B	Anal	yst: HRG							
* Total Organic Carbon	2/20/20 14:14	2/20/20 14:1	4 1		1.42	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	Anal	yst: JCC							
* Chloride	2/14/20 12:03	2/14/20 12:0)3 4	1	47.4	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	Anal	yst: JCC							
* Fluoride	2/14/20 15:52	2/14/20 15:5	52 1		Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E	Anal	yst: JCC							
* Sulfate	2/17/20 16:39	2/17/20 16:3	89 1	100	625	mg/L	50.00	100	

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/13/20 11:30

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-4

Laboratory ID Number: BA03152

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155 Sodium, Total	mg/L	0.00864	0.044	5.00	5.14	5.07	5.13	4.25 to 5.75	103	70 to 130	1.37	20
BA03155 Calcium, Total	mg/L	0.00945	0.1518	5.00	5.18	5.08	5.13	4.25 to 5.75	104	70 to 130	1.95	20
BA03155 Potassium, Total	mg/L	-0.0179	0.3674	10.0	9.93	9.95	9.93	8.5 to 11.5	99.3	70 to 130	0.201	20
BA03155 Beryllium, Total	mg/L	0.0000157	0.00088	0.10	0.0934	0.0922	0.0939	0.085 to 0.115	93.4	70 to 130	1.29	20
BA03155 Manganese, Total	mg/L	0.0000559	0.0001474	0.10	0.0985	0.0991	0.0994	0.085 to 0.115	98.5	70 to 130	0.607	20
BA03155 Selenium, Total	mg/L	0.0000707	0.00066	0.10	0.0972	0.0970	0.0980	0.085 to 0.115	97.2	70 to 130	0.206	20
BA03155 Silicon, Total	mg/L	-0.00207	0.044	1.00	1.04	1.02	1.02	0.850 to 1.15	104	70 to 130	1.94	20
BA03155 Boron, Total	mg/L	-0.000835	0.0650254	1.00	1.04	1.02	1.02	0.85 to 1.15	104	70 to 130	1.94	20
BA03155 Chromium, Total	mg/L	0.0000925	0.00044	0.10	0.0994	0.0982	0.0999	0.085 to 0.115	99.4	70 to 130	1.21	20
BA03155 Antimony, Total	mg/L	0.000277	0.00066	0.10	0.0916	0.0929	0.0929	0.085 to 0.115	91.6	70 to 130	1.41	20
BA03153 Chromium, Dissolved	mg/L	-0.0000212	0.00044	0.10	0.0818	0.0775	0.0992	0.085 to 0.115	81.8	70 to 130	5.40	20
BA03153 Selenium, Dissolved	mg/L	0.0000522	0.00066	0.10	0.0861	0.0835	0.0976	0.085 to 0.115	82.8	70 to 130	3.07	20
BA03153 Thallium, Dissolved	mg/L	-0.00000072	0.0001474	0.10	0.0932	0.0882	0.0934	0.085 to 0.115	93.2	70 to 130	5.51	20
BA03155 Ortho Phosphate	mg/L as P	0.001	0.015	0.250	0.239	0.242	0.244	0.225 to 0.275	95.6	80 to 120	1.25	10
BA03155 Cobalt, Total	mg/L	0.00000003	0.0001474	0.10	0.0953	0.0963	0.0972	0.085 to 0.115	95.3	70 to 130	1.04	20
BA03155 Lead, Total	mg/L	0.00000137	0.0001474	0.10	0.101	0.102	0.0998	0.085 to 0.115	101	70 to 130	0.985	20
BA03153 Beryllium, Dissolved	mg/L	0.0000179	0.00088	0.10	0.0955	0.0913	0.0922	0.085 to 0.115	91.2	70 to 130	4.50	20
BA03153 Manganese, Dissolved	mg/L	0.0000199	0.0001474	0.10	10.7	10.6	0.0994	0.085 to 0.115	600	70 to 130	0.939	20
BA03155 Arsenic, Total	mg/L	-0.00000048	0.0001474	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.00	20
BA03155 Total Organic Carbon	mg/L	0.510	1.00	10.0	8.72	8.65	9.38	9 to 11	87.2	80 to 120	0.806	20
BA03153 Iron, Dissolved	mg/L	0.000151	0.0176	0.2	12.3	12.6	0.204	0.17 to 0.23	-100	70 to 130	2.41	20
BA03153 Lead, Dissolved	mg/L	0.00000362	0.0001474	0.10	0.0975	0.0919	0.100	0.085 to 0.115	97.5	70 to 130	5.91	20
BA03153 Antimony, Dissolved	mg/L	0.000203	0.00066	0.10	0.0882	0.0890	0.0904	0.085 to 0.115	88.2	70 to 130	0.903	20
BA03155 Aluminum, Total	mg/L	0.000664	0.0088	0.10	0.0983	0.100	0.0977	0.085 to 0.115	98.3	70 to 130	1.71	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/13/20 11:30

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-4

Laboratory ID Number: BA03152

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155 Barium, Total	mg/L	0.00000312	0.0002	0.10	0.0985	0.0966	0.0994	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03155 Iron, Total	mg/L	0.000675	0.0176	0.2	0.208	0.205	0.207	0.17 to 0.23	104	70 to 130	1.45	20
BA03155 Magnesium, Total	mg/L	-0.00133	0.0462	5.00	5.17	5.07	5.13	4.25 to 5.75	103	70 to 130	1.95	20
BA03155 Molybdenum, Total	mg/L	0.0000146	0.0001474	0.10	0.0977	0.0971	0.0969	0.085 to 0.115	97.7	70 to 130	0.616	20
BA03153 Aluminum, Dissolved	mg/L	0.0000657	0.0088	0.10	10.7	10.5	0.0990	0.085 to 0.115	600	70 to 130	1.89	20
BA03153 Arsenic, Dissolved	mg/L	-0.00000084	0.0001474	0.10	0.102	0.0958	0.103	0.085 to 0.115	101	70 to 130	6.27	20
BA03153 Cadmium, Dissolved	mg/L	-0.0000014	0.0001474	0.10	0.0938	0.0911	0.0972	0.085 to 0.115	92.1	70 to 130	2.92	20
BA03153 Cobalt, Dissolved	mg/L	-0.00000176	0.0001474	0.10	0.330	0.322	0.0978	0.085 to 0.115	97.0	70 to 130	2.45	20
BA03153 Molybdenum, Dissolved	mg/L	0.00000579	0.0001474	0.10	0.0822	0.0820	0.0970	0.085 to 0.115	82.2	70 to 130	0.244	20
BA03155 Cadmium, Total	mg/L	-0.00000398	0.0001474	0.10	0.0955	0.0958	0.0972	0.085 to 0.115	95.5	70 to 130	0.314	20
BA03155 Lithium, Total	mg/L	0.0000591	0.0154	0.20	0.196	0.195	0.195	0.17 to 0.23	98.0	70 to 130	0.512	20
BA03155 Thallium, Total	mg/L	0.00000251	0.0001474	0.10	0.0961	0.0979	0.0967	0.085 to 0.115	96.1	70 to 130	1.86	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date: 2/13/20 11:30

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-4

Laboratory ID Number: BA03152

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	Limit
BA03155	Sulfate	mg/L	-0.419	0.50	20.0	18.3	-0.837	18.5	18 to 22	91.5	80 to 120	0.00	20
BA03155	Chloride	mg/L	-0.034	0.50	10.0	10.1	0.0918	10.2	9 to 11	101	80 to 120	0.00	20
BA03155	Nitrogen, Nitrite	mg/L as N	0.002	0.20	0.50	0.547	0.001	0.779	0.675 to 0.825	109	90 to 110	0.00	15
BA03153	Alkalinity, Total as CaCO3	mg/L					NA	49.8	45.0 to 55.0			NA	10
BA03155	Fluoride	mg/L	0.0245	0.05	2.50	2.51	0.0155	2.54	2.25 to 2.75	100	80 to 120	0.00	20
BA03155	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.20	2.00	2.00	0.035	1.98	1.8 to 2.2	100	90 to 110	0.00	15

Certificate Of Analysis



Description: Gorgas Gypsum - GS-GSA-MW-4 DUPLocation Code:WMWGORGCollected:2/13/20 11:30

Customer ID:

Laboratory ID Number: BA03153 Submittal Date: 2/14/20 09:17

Anal	yst: RDA			Preparati	ion Method: E	PA 1638	_	
2/18/20 15:15	2/19/20 12:	52	1.015	2.71	mg/L	0.03	0.1	
2/18/20 15:15	2/19/20 14:	12	10.15	99.3	mg/L	1.015	5.075	
2/18/20 15:15	2/19/20 14:	12	10.15	21.7	mg/L	0.3045	3.045	
2/18/20 15:15	2/19/20 14:	12	10.15	12.6	mg/L	0.203	0.5075	
2/18/20 15:15	2/19/20 12:	52	1.015	0.297	mg/L	0.01	0.02	
2/18/20 15:15	2/19/20 14:	12	10.15	86.6	mg/L	1.015	5.075	
2/18/20 15:15	2/19/20 14:	12	1	46.4	mg/L			
2/18/20 15:15	2/19/20 12:	52	1.015	16.2	mg/L	0.1	0.5	
Anal	yst: RDA							
2/17/20 08:30	2/17/20 12:3	30	10.15	12.5	mg/L	0.203	0.5075	RA
Anal	yst: DLJ			Preparati	ion Method: E	PA 1638		
2/14/20 10:47	2/14/20 17:	12	1.015	Not Detected	mg/L	0.0008	0.003	U
2/14/20 10:47	2/14/20 17:	12	1.015	0.00137	mg/L	0.001	0.005	J
2/14/20 10:47	2/14/20 17:3	33	10.15	10.6	mg/L	0.203	0.609	
2/14/20 10:47	2/14/20 17:	12	1.015	0.0126	mg/L	0.002	0.01	
2/14/20 10:47	2/14/20 17:	12	1.015	0.00434	mg/L	0.0006	0.003	
2/14/20 10:47	2/14/20 17:	12	1.015	0.00182	mg/L	0.0003	0.001	
2/14/20 10:47	2/14/20 17:	12	1.015	Not Detected	mg/L	0.002	0.01	U
2/14/20 10:47	2/14/20 17:	12	1.015	0.232	mg/L	0.002	0.005	
2/14/20 10:47	2/14/20 17:	12	1.015	Not Detected	mg/L	0.001	0.005	U
2/14/20 10:47	2/14/20 17:	12	1.015	Not Detected	mg/L	0.002	0.01	U
2/14/20 10:47	2/14/20 17:3	33	10.15	10.6	mg/L	0.01015	0.05075	
2/14/20 10:47	2/14/20 17:	12	1.015	4.28	mg/L	0.3	2.5	
2/14/20 10:47	2/14/20 17:	12	1.015	0.00308	mg/L	0.002	0.01	J
2/14/20 10:47	2/14/20 17:	12	1.015	Not Detected	mg/L	0.0002	0.001	U
Anal	yst: DLJ							
-		35	1.015	Not Detected	mg/L	0.0008	0.003	U
2/14/20 11:21	2/14/20 13:4	44	10.15	10.1	mg/L	0.203	0.609	RA
2/14/20 11:21	2/14/20 12:	35	1.015	0.00123	mg/L	0.001	0.005	J
			1.015	0.00433	mg/L	0.0006	0.003	
	2/18/20 15:15 2/18/20 15:15 2/18/20 15:15 2/18/20 15:15 2/18/20 15:15 2/18/20 15:15 2/18/20 15:15 2/18/20 15:15 2/18/20 15:15 2/18/20 15:15 2/18/20 10:47 2/14/20 11:21 2/14/20 11:21	2/18/20 15:15	2/18/20 15:15	2/18/20 15:15	2/18/20 15:15	2/18/20 15:15 2/19/20 12:52 1.015 2.71 mg/L 2/18/20 15:15 2/19/20 14:12 10.15 99.3 mg/L 2/18/20 15:15 2/19/20 14:12 10.15 21.7 mg/L 2/18/20 15:15 2/19/20 14:12 10.15 12.6 mg/L 2/18/20 15:15 2/19/20 12:52 1.015 0.297 mg/L 2/18/20 15:15 2/19/20 14:12 1 46.4 mg/L 2/18/20 15:15 2/19/20 12:52 1.015 16.2 mg/L 2/18/20 15:15 2/19/20 12:30 10.15 16.2 mg/L Analyst: RDA 2/17/20 08:30 2/17/20 12:30 10.15 12.5 mg/L Analyst: DLJ Preparation Method: E 2/14/20 10:47 2/14/20 17:12 1.015 Not Detected mg/L 2/14/20 10:47 2/14/20 17:12 1.015 0.00137 mg/L 2/14/20 10:47 2/14/20 17:12 1.015 0.0126 mg/L 2/14/20 10:47 2/14/20 17:12 1.015 0.00137 mg/L 2/14/20 10:47 2/14/20 17:12 1.015 Not D	2/18/20 15:15 2/19/20 12:52 1.015 2.71 mg/L 0.03 2/18/20 15:15 2/19/20 14:12 10.15 99.3 mg/L 1.015 2/18/20 15:15 2/19/20 14:12 10.15 21.7 mg/L 0.3045 2/18/20 15:15 2/19/20 14:12 10.15 12.6 mg/L 0.203 2/18/20 15:15 2/19/20 12:52 1.015 0.297 mg/L 0.01 2/18/20 15:15 2/19/20 14:12 10.15 86.6 mg/L 1.015 2/18/20 15:15 2/19/20 12:52 1.015 16.2 mg/L 0.1 Analyst: BDA 2/17/20 8:30 2/17/20 12:30 10.15 12.5 mg/L 0.203 Analyst: DLJ Preparation Method: EPA 1638 2/14/20 10:47 2/14/20 17:12 1.015 Not Detected mg/L 0.0003 2/14/20 10:47 2/14/20 17:12 1.015 Not Detected mg/L 0.0008 2/14/20 10:47 2/14/20 17:12 1.015 0.00137 mg/L 0.001 2/14/20 10:47<	2/18/20 15:15 2/19/20 12:52 1.015 2.71 mg/L 0.03 0.1

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

Certificate Of Analysis



Description: Gorgas Gypsum - GS-GSA-MW-4 DUPLocation Code:WMWGORGCollected:2/13/20 11:30

Customer ID:

Submittal Date: 2/14/20 09:17

Laboratory ID Number: BA03153

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Cadmium, Dissolved	2/14/20 11:21	2/14/20 12:3	5 1.015	0.00173	mg/L	0.0003	0.001	
Chromium, Dissolved	2/14/20 11:21	2/14/20 12:3	5 1.015	Not Detected	mg/L	0.002	0.01	U
Cobalt, Dissolved	2/14/20 11:21	2/14/20 12:3	5 1.015	0.233	mg/L	0.002	0.005	
Lead, Dissolved	2/14/20 11:21	2/14/20 12:3	5 1.015	Not Detected	mg/L	0.001	0.005	U
Molybdenum, Dissolved	2/14/20 11:21	2/14/20 12:3	5 1.015	Not Detected	mg/L	0.002	0.01	U
Manganese, Dissolved	2/14/20 11:21	2/14/20 13:4	4 10.15	10.1	mg/L	0.01015	0.05075	RA
Selenium, Dissolved	2/14/20 11:21	2/14/20 12:3	5 1.015	0.00334	mg/L	0.002	0.01	J
Thallium, Dissolved	2/14/20 11:21	2/14/20 12:3	5 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2	Anal	yst: CES						
Nitrogen, Nitrate/Nitrite	2/14/20 12:37	2/14/20 12:3	7 1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/14/20 13:06	2/14/20 13:0	6 1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/14/20 13:06	2/14/20 13:0	6 1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	Anal	yst: JAG						
Alkalinity, Total as CaCO3	2/24/20 13:30	2/24/20 13:4	0 1	NA	mg/L		0.1	
Analytical Method: SM 4500CO2 D	Anal	yst: JAG						
Bicarbonate Alkalinity, (calc.)	2/24/20 13:30	2/24/20 13:4	0 1	NA	mg/L			
Carbonate Alkalinity, (calc.)	2/24/20 13:30	2/24/20 13:4	0 1	NA	mg/L			
Analytical Method: SM 4500PF-OP	Anal	yst: CES						
Ortho Phosphate	2/14/20 13:40	2/14/20 13:4	0 1	Not Detected	mg/L as P	0.010	0.03	U
Analytical Method: SM 5310 B	Anal	yst: HRG						
Total Organic Carbon	2/20/20 14:26	2/20/20 14:2	6 1	1.30	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	Anal	yst: JCC						
Chloride	2/14/20 12:05	2/14/20 12:0	5 4	46.3	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	Anal	yst: JCC						
Fluoride	2/14/20 15:54	2/14/20 15:5	4 1	Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E	Anal	yst: JCC						
· Sulfate	2/17/20 16:40	•	0 100	623	mg/L	50.00	100	

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

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/13/20 11:30

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-4 DUP

Laboratory ID Number: BA03153

	atory is realison Brooks	-		MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155	Sodium, Total	mg/L	0.00864	0.044	5.00	5.14	5.07	5.13	4.25 to 5.75	103	70 to 130	1.37	20
BA03155	Calcium, Total	mg/L	0.00945	0.1518	5.00	5.18	5.08	5.13	4.25 to 5.75	104	70 to 130	1.95	20
BA03155	Potassium, Total	mg/L	-0.0179	0.3674	10.0	9.93	9.95	9.93	8.5 to 11.5	99.3	70 to 130	0.201	20
BA03153	Beryllium, Dissolved	mg/L	0.0000179	0.00088	0.10	0.0955	0.0913	0.0922	0.085 to 0.115	91.2	70 to 130	4.50	20
BA03153	Manganese, Dissolved	mg/L	0.0000199	0.0001474	0.10	10.7	10.6	0.0994	0.085 to 0.115	600	70 to 130	0.939	20
BA03155	Arsenic, Total	mg/L	-0.00000048	0.0001474	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.00	20
BA03155	Total Organic Carbon	mg/L	0.510	1.00	10.0	8.72	8.65	9.38	9 to 11	87.2	80 to 120	0.806	20
BA03155	Boron, Total	mg/L	-0.000835	0.0650254	1.00	1.04	1.02	1.02	0.85 to 1.15	104	70 to 130	1.94	20
BA03155	Chromium, Total	mg/L	0.0000925	0.00044	0.10	0.0994	0.0982	0.0999	0.085 to 0.115	99.4	70 to 130	1.21	20
BA03155	Antimony, Total	mg/L	0.000277	0.00066	0.10	0.0916	0.0929	0.0929	0.085 to 0.115	91.6	70 to 130	1.41	20
BA03153	Aluminum, Dissolved	mg/L	0.0000657	0.0088	0.10	10.7	10.5	0.0990	0.085 to 0.115	600	70 to 130	1.89	20
BA03153	Arsenic, Dissolved	mg/L	-0.00000084	0.0001474	0.10	0.102	0.0958	0.103	0.085 to 0.115	101	70 to 130	6.27	20
BA03153	Cadmium, Dissolved	mg/L	-0.0000014	0.0001474	0.10	0.0938	0.0911	0.0972	0.085 to 0.115	92.1	70 to 130	2.92	20
BA03153	Cobalt, Dissolved	mg/L	-0.00000176	0.0001474	0.10	0.330	0.322	0.0978	0.085 to 0.115	97.0	70 to 130	2.45	20
BA03153	Molybdenum, Dissolved	mg/L	0.00000579	0.0001474	0.10	0.0822	0.0820	0.0970	0.085 to 0.115	82.2	70 to 130	0.244	20
BA03155	Cadmium, Total	mg/L	-0.00000398	0.0001474	0.10	0.0955	0.0958	0.0972	0.085 to 0.115	95.5	70 to 130	0.314	20
BA03155	Lithium, Total	mg/L	0.0000591	0.0154	0.20	0.196	0.195	0.195	0.17 to 0.23	98.0	70 to 130	0.512	20
BA03155	Thallium, Total	mg/L	0.00000251	0.0001474	0.10	0.0961	0.0979	0.0967	0.085 to 0.115	96.1	70 to 130	1.86	20
BA03153	Chromium, Dissolved	mg/L	-0.0000212	0.00044	0.10	0.0818	0.0775	0.0992	0.085 to 0.115	81.8	70 to 130	5.40	20
BA03153	Selenium, Dissolved	mg/L	0.0000522	0.00066	0.10	0.0861	0.0835	0.0976	0.085 to 0.115	82.8	70 to 130	3.07	20
BA03153	Thallium, Dissolved	mg/L	-0.00000072	0.0001474	0.10	0.0932	0.0882	0.0934	0.085 to 0.115	93.2	70 to 130	5.51	20
BA03155	Ortho Phosphate	mg/L as P	0.001	0.015	0.250	0.239	0.242	0.244	0.225 to 0.275	95.6	80 to 120	1.25	10
BA03155	Cobalt, Total	mg/L	0.00000003	0.0001474	0.10	0.0953	0.0963	0.0972	0.085 to 0.115	95.3	70 to 130	1.04	20
BA03155	Lead, Total	mg/L	0.00000137	0.0001474	0.10	0.101	0.102	0.0998	0.085 to 0.115	101	70 to 130	0.985	20

Batch QC Summary



Customer Account: WMWGORG **Sample Date:** 2/13/20 11:30

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-4 DUP

Laboratory ID Number: BA03153

			MB					Standard		Rec		Prec
Sample Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155 Beryllium, Total	mg/L	0.0000157	0.00088	0.10	0.0934	0.0922	0.0939	0.085 to 0.115	93.4	70 to 130	1.29	20
BA03155 Manganese, Total	mg/L	0.0000559	0.0001474	0.10	0.0985	0.0991	0.0994	0.085 to 0.115	98.5	70 to 130	0.607	20
BA03155 Selenium, Total	mg/L	0.0000707	0.00066	0.10	0.0972	0.0970	0.0980	0.085 to 0.115	97.2	70 to 130	0.206	20
BA03155 Silicon, Total	mg/L	-0.00207	0.044	1.00	1.04	1.02	1.02	0.850 to 1.15	104	70 to 130	1.94	20
BA03153 Iron, Dissolved	mg/L	0.000151	0.0176	0.2	12.3	12.6	0.204	0.17 to 0.23	-100	70 to 130	2.41	20
BA03153 Lead, Dissolved	mg/L	0.00000362	0.0001474	0.10	0.0975	0.0919	0.100	0.085 to 0.115	97.5	70 to 130	5.91	20
BA03153 Antimony, Dissolved	mg/L	0.000203	0.00066	0.10	0.0882	0.0890	0.0904	0.085 to 0.115	88.2	70 to 130	0.903	20
BA03155 Aluminum, Total	mg/L	0.000664	0.0088	0.10	0.0983	0.100	0.0977	0.085 to 0.115	98.3	70 to 130	1.71	20
BA03155 Barium, Total	mg/L	0.00000312	0.0002	0.10	0.0985	0.0966	0.0994	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03155 Iron, Total	mg/L	0.000675	0.0176	0.2	0.208	0.205	0.207	0.17 to 0.23	104	70 to 130	1.45	20
BA03155 Magnesium, Total	mg/L	-0.00133	0.0462	5.00	5.17	5.07	5.13	4.25 to 5.75	103	70 to 130	1.95	20
BA03155 Molybdenum, Total	mg/L	0.0000146	0.0001474	0.10	0.0977	0.0971	0.0969	0.085 to 0.115	97.7	70 to 130	0.616	20

Batch QC Summary



Customer Account: WMWGORG

Sample Date:

2/13/20 11:30

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum - GS-GSA-MW-4 DUP

Laboratory ID Number: BA03153

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	l Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155	Sulfate	mg/L	-0.419	0.50	20.0	18.3	-0.837	18.5	18 to 22	91.5	80 to 120	0.00	20
BA03155	Chloride	mg/L	-0.034	0.50	10.0	10.1	0.0918	10.2	9 to 11	101	80 to 120	0.00	20
BA03155	Nitrogen, Nitrite	mg/L as N	0.002	0.20	0.50	0.547	0.001	0.779	0.675 to 0.825	109	90 to 110	0.00	15
BA03153	Alkalinity, Total as CaCO3	mg/L					NA	49.8	45.0 to 55.0			NA	10
BA03155	Fluoride	mg/L	0.0245	0.05	2.50	2.51	0.0155	2.54	2.25 to 2.75	100	80 to 120	0.00	20
BA03155	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.20	2.00	2.00	0.035	1.98	1.8 to 2.2	100	90 to 110	0.00	15

Certificate Of Analysis



Description: Gorgas Gypsum Field BlankLocation Code:WMWGORGFBCollected:2/13/20 11:40

Customer ID:

Laboratory ID Number: BA03154 Submittal Date: 2/14/20 09:17

Name	Prepared	Analyzed	Vio Spec DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA		Preparati	ion Method: EP	A 1638		
* Boron, Total	2/18/20 15:15	2/19/20 12:5	5 1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/18/20 15:15	2/19/20 12:5	5 1.015	Not Detected	mg/L	0.1	0.5	U
Silicon, Total	2/18/20 15:15	2/19/20 12:5	5 1.015	Not Detected	mg/L	0.03	0.3	U
* Iron, Total	2/18/20 15:15	2/19/20 12:5	5 1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	2/18/20 15:15	2/19/20 12:5	5 1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	2/18/20 15:15	2/19/20 12:5	5 1.015	Not Detected	mg/L	0.1	0.5	U
Silica, Total (calc.)	2/18/20 15:15	2/19/20 12:5	5 1	Not Detected	mg/L			U
* Sodium, Total	2/18/20 15:15	2/19/20 12:5	5 1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	Anal	yst: DLJ		Preparati	ion Method: EP	A 1638		
* Antimony, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.002	0.01	U
∗ Thallium, Total	2/14/20 10:47	2/14/20 17:1	4 1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2	Anal	yst: CES						
* Nitrogen, Nitrate/Nitrite	2/14/20 12:38	2/14/20 12:3	8 1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/14/20 13:07			Not Detected				U
Nitrogen, Nitrite	2/14/20 13:07			Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 4500PF-OP	Anal	yst: CES						
Ortho Phosphate	2/14/20 13:41		1 1	Not Detected	mg/Las P	0.010	0.03	U

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

Comments:

Certificate Of Analysis

Vio Spec DF

1

Analyzed

Analyst: HRG

Analyst: JCC

Analyst: JCC

Analyst: JCC

2/14/20 12:06 2/14/20 12:06

2/14/20 15:55 2/14/20 15:55

2/17/20 16:42 2/17/20 16:42

2/20/20 14:37 2/20/20 14:37

Prepared



0.1

1

U

Description: Gorgas Gypsum Field Blank

Location Code:

WMWGORGFB

Collected:

Not Detected mg/L

Not Detected mg/L

Customer ID:

2/13/20 11:40

2/14/20 09:17

Laboratory ID Number: BA03154

Analytical Method: SM 5310 B

Analytical Method: SM4500CI E

Analytical Method: SM4500F G 2017

Analytical Method: SM4500SO4 E

* Total Organic Carbon

Name

* Chloride

* Fluoride

* Sulfate

Submittal Date:

 Results
 Units
 MDL
 RL
 Q

 Not Detected
 mg/L
 1.00
 2
 U

 Not Detected
 mg/L
 0.50
 1
 U

0.05

0.50

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

Comments:

Reported: 3/18/2020 Version: 3.1 COA_CCR

Batch QC Summary



Customer Account: WMWGORGFB **Sample Date:** 2/13/20 11:40

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum Field Blank

Laboratory ID Number: BA03154

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155	Sodium, Total	mg/L	0.00864	0.044	5.00	5.14	5.07	5.13	4.25 to 5.75	103	70 to 130	1.37	20
BA03155	Calcium, Total	mg/L	0.00945	0.1518	5.00	5.18	5.08	5.13	4.25 to 5.75	104	70 to 130	1.95	20
BA03155	Potassium, Total	mg/L	-0.0179	0.3674	10.0	9.93	9.95	9.93	8.5 to 11.5	99.3	70 to 130	0.201	20
BA03155	Arsenic, Total	mg/L	-0.00000048	0.0001474	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.00	20
BA03155	Total Organic Carbon	mg/L	0.510	1.00	10.0	8.72	8.65	9.38	9 to 11	87.2	80 to 120	0.806	20
BA03155	Ortho Phosphate	mg/L as P	0.001	0.015	0.250	0.239	0.242	0.244	0.225 to 0.275	95.6	80 to 120	1.25	10
BA03155	Cobalt, Total	mg/L	0.00000003	0.0001474	0.10	0.0953	0.0963	0.0972	0.085 to 0.115	95.3	70 to 130	1.04	20
BA03155	Lead, Total	mg/L	0.00000137	0.0001474	0.10	0.101	0.102	0.0998	0.085 to 0.115	101	70 to 130	0.985	20
BA03155	Aluminum, Total	mg/L	0.000664	0.0088	0.10	0.0983	0.100	0.0977	0.085 to 0.115	98.3	70 to 130	1.71	20
BA03155	Barium, Total	mg/L	0.00000312	0.0002	0.10	0.0985	0.0966	0.0994	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03155	Iron, Total	mg/L	0.000675	0.0176	0.2	0.208	0.205	0.207	0.17 to 0.23	104	70 to 130	1.45	20
BA03155	Magnesium, Total	mg/L	-0.00133	0.0462	5.00	5.17	5.07	5.13	4.25 to 5.75	103	70 to 130	1.95	20
BA03155	Molybdenum, Total	mg/L	0.0000146	0.0001474	0.10	0.0977	0.0971	0.0969	0.085 to 0.115	97.7	70 to 130	0.616	20
BA03155	Cadmium, Total	mg/L	-0.00000398	0.0001474	0.10	0.0955	0.0958	0.0972	0.085 to 0.115	95.5	70 to 130	0.314	20
BA03155	Lithium, Total	mg/L	0.0000591	0.0154	0.20	0.196	0.195	0.195	0.17 to 0.23	98.0	70 to 130	0.512	20
BA03155	Thallium, Total	mg/L	0.00000251	0.0001474	0.10	0.0961	0.0979	0.0967	0.085 to 0.115	96.1	70 to 130	1.86	20
BA03155	Beryllium, Total	mg/L	0.0000157	0.00088	0.10	0.0934	0.0922	0.0939	0.085 to 0.115	93.4	70 to 130	1.29	20
BA03155	Manganese, Total	mg/L	0.0000559	0.0001474	0.10	0.0985	0.0991	0.0994	0.085 to 0.115	98.5	70 to 130	0.607	20
BA03155	Selenium, Total	mg/L	0.0000707	0.00066	0.10	0.0972	0.0970	0.0980	0.085 to 0.115	97.2	70 to 130	0.206	20
BA03155	Silicon, Total	mg/L	-0.00207	0.044	1.00	1.04	1.02	1.02	0.850 to 1.15	104	70 to 130	1.94	20
BA03155	Boron, Total	mg/L	-0.000835	0.0650254	1.00	1.04	1.02	1.02	0.85 to 1.15	104	70 to 130	1.94	20
BA03155	Chromium, Total	mg/L	0.0000925	0.00044	0.10	0.0994	0.0982	0.0999	0.085 to 0.115	99.4	70 to 130	1.21	20
BA03155	Antimony, Total	mg/L	0.000277	0.00066	0.10	0.0916	0.0929	0.0929	0.085 to 0.115	91.6	70 to 130	1.41	20

Batch QC Summary



Customer Account: WMWGORGFB

Sample Date:

2/13/20 11:40

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum Field Blank

Laboratory ID Number: BA03154

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155	Sulfate	mg/L	-0.419	0.50	20.0	18.3	-0.837	18.5	18 to 22	91.5	80 to 120	0.00	20
BA03155	Chloride	mg/L	-0.034	0.50	10.0	10.1	0.0918	10.2	9 to 11	101	80 to 120	0.00	20
BA03155	Nitrogen, Nitrite	mg/L as N	0.002	0.20	0.50	0.547	0.001	0.779	0.675 to 0.825	109	90 to 110	0.00	15
BA03155	Fluoride	mg/L	0.0245	0.05	2.50	2.51	0.0155	2.54	2.25 to 2.75	100	80 to 120	0.00	20
BA03155	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.20	2.00	2.00	0.035	1.98	1.8 to 2.2	100	90 to 110	0.00	15

Certificate Of Analysis



Description: Gorgas Gypsum Equipment BlankLocation Code:WMWGORGEBCollected:2/13/20 12:35

Customer ID:

Submittal Date: 2/14/20 09:17

Laboratory ID Number: BA03155					Submitt	al Date:	2/14/20 09:	17	
Name	Prepared	Analyzed	Vio Spec DF	=	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	Anal	yst: RDA			Preparati	on Method: E	PA 1638		
* Boron, Total	2/18/20 15:15	2/19/20 12:5	58 1.0°	15	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/18/20 15:15	2/19/20 12:5	58 1.0°	15	Not Detected	mg/L	0.1	0.5	U
Silicon, Total	2/18/20 15:15	2/19/20 12:5	58 1.0°	15	Not Detected	mg/L	0.03	0.3	U
* Iron, Total	2/18/20 15:15	2/19/20 12:5	58 1.0°	15	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	2/18/20 15:15	2/19/20 12:5	58 1.0°	15	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	2/18/20 15:15	2/19/20 12:5	58 1.0°	15	Not Detected	mg/L	0.1	0.5	U
Silica, Total (calc.)	2/18/20 15:15	2/19/20 12:5	58 1		Not Detected	mg/L			U
* Sodium, Total	2/18/20 15:15	2/19/20 12:5	58 1.0°	15	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	Anal	yst: DLJ			Preparati	on Method: E	PA 1638		
* Antimony, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.001	0.005	U
 Molybdenum, Total 	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/14/20 10:47	2/14/20 17:1	7 1.0	15	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2	Anal	yst: CES							
* Nitrogen, Nitrate/Nitrite	2/14/20 12:41	2/14/20 12:4	1 1		Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/14/20 13:09	2/14/20 13:0	9 1		Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/14/20 13:09	2/14/20 13:0	9 1		Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 4500PF-OP	Anal	yst: CES							
Ortho Phosphate	2/14/20 13:43		l3 1		Not Detected	mg/L as P	0.010	0.03	U

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

Laboratory ID Number: BA03155

Certificate Of Analysis



Description: Gorgas Gypsum Equipment Blank

Location Code:

WMWGORGEB

Collected:

Customer ID:

2/13/20 12:35

Submittal Date:

2/14/20 09:17

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	Ana	lyst: HRG							_
* Total Organic Carbon	2/20/20 14:49	2/20/20 14:4	19	1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	Ana	lyst: JCC							
* Chloride	2/14/20 12:07	2/14/20 12:0)7	1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	Ana	lyst: JCC							
* Fluoride	2/14/20 15:56	2/14/20 15:5	56	1	Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E	Ana	lyst: JCC							
* Sulfate	2/17/20 16:43	3 2/17/20 16:4	13	1	Not Detected	mg/L	0.50	1	U

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

Batch QC Summary



Customer Account: WMWGORGEB **Sample Date:** 2/13/20 12:35

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum Equipment Blank

Laboratory ID Number: BA03155

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit Pr	ес	<u>Li</u> mit
BA03155	Sodium, Total	mg/L	0.00864	0.044	5.00	5.14	5.07	5.13	4.25 to 5.75	103	70 to 130 1.3	7	20
BA03155	Beryllium, Total	mg/L	0.0000157	0.00088	0.10	0.0934	0.0922	0.0939	0.085 to 0.115	93.4	70 to 130 1.2	9	20
BA03155	Manganese, Total	mg/L	0.0000559	0.0001474	0.10	0.0985	0.0991	0.0994	0.085 to 0.115	98.5	70 to 130 0.6	07	20
BA03155	Selenium, Total	mg/L	0.0000707	0.00066	0.10	0.0972	0.0970	0.0980	0.085 to 0.115	97.2	70 to 130 0.2	06	20
BA03155	Silicon, Total	mg/L	-0.00207	0.044	1.00	1.04	1.02	1.02	0.850 to 1.15	104	70 to 130 1.9	4	20
BA03155	Calcium, Total	mg/L	0.00945	0.1518	5.00	5.18	5.08	5.13	4.25 to 5.75	104	70 to 130 1.9	5	20
BA03155	Potassium, Total	mg/L	-0.0179	0.3674	10.0	9.93	9.95	9.93	8.5 to 11.5	99.3	70 to 130 0.2	01	20
BA03155	Cadmium, Total	mg/L	-0.00000398	0.0001474	0.10	0.0955	0.0958	0.0972	0.085 to 0.115	95.5	70 to 130 0.3	14	20
BA03155	Lithium, Total	mg/L	0.0000591	0.0154	0.20	0.196	0.195	0.195	0.17 to 0.23	98.0	70 to 130 0.5	12	20
BA03155	Thallium, Total	mg/L	0.00000251	0.0001474	0.10	0.0961	0.0979	0.0967	0.085 to 0.115	96.1	70 to 130 1.8	6	20
BA03155	Boron, Total	mg/L	-0.000835	0.0650254	1.00	1.04	1.02	1.02	0.85 to 1.15	104	70 to 130 1.9	4	20
BA03155	Chromium, Total	mg/L	0.0000925	0.00044	0.10	0.0994	0.0982	0.0999	0.085 to 0.115	99.4	70 to 130 1.2	1	20
BA03155	Antimony, Total	mg/L	0.000277	0.00066	0.10	0.0916	0.0929	0.0929	0.085 to 0.115	91.6	70 to 130 1.4	1	20
BA03155	Arsenic, Total	mg/L	-0.00000048	0.0001474	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130 0.0	0	20
BA03155	Total Organic Carbon	mg/L	0.510	1.00	10.0	8.72	8.65	9.38	9 to 11	87.2	80 to 120 0.8	06	20
BA03155	Ortho Phosphate	mg/L as P	0.001	0.015	0.250	0.239	0.242	0.244	0.225 to 0.275	95.6	80 to 120 1.2	5	10
BA03155	Cobalt, Total	mg/L	0.00000003	0.0001474	0.10	0.0953	0.0963	0.0972	0.085 to 0.115	95.3	70 to 130 1.0	4	20
BA03155	Lead, Total	mg/L	0.00000137	0.0001474	0.10	0.101	0.102	0.0998	0.085 to 0.115	101	70 to 130 0.9	85	20
BA03155	Aluminum, Total	mg/L	0.000664	0.0088	0.10	0.0983	0.100	0.0977	0.085 to 0.115	98.3	70 to 130 1.7	1	20
BA03155	Barium, Total	mg/L	0.00000312	0.0002	0.10	0.0985	0.0966	0.0994	0.085 to 0.115	98.5	70 to 130 1.9	5	20
BA03155	Iron, Total	mg/L	0.000675	0.0176	0.2	0.208	0.205	0.207	0.17 to 0.23	104	70 to 130 1.4	5	20
BA03155	Magnesium, Total	mg/L	-0.00133	0.0462	5.00	5.17	5.07	5.13	4.25 to 5.75	103	70 to 130 1.9	5	20
BA03155	Molybdenum, Total	mg/L	0.0000146	0.0001474	0.10	0.0977	0.0971	0.0969	0.085 to 0.115	97.7	70 to 130 0.6	16	20

Batch QC Summary



Customer Account: WMWGORGEB Sample Date:

2/13/20 12:35

Customer ID:

Delivery Date: 2/14/20 09:17

Description: Gorgas Gypsum Equipment Blank

Laboratory ID Number: BA03155

				MB			Sample		Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	Duplicate	Standard	Limit	Rec	Limit	Prec	<u>Li</u> mit
BA03155	Sulfate	mg/L	-0.419	0.50	20.0	18.3	-0.837	18.5	18 to 22	91.5	80 to 120	0.00	20
BA03155	Chloride	mg/L	-0.034	0.50	10.0	10.1	0.0918	10.2	9 to 11	101	80 to 120	0.00	20
BA03155	Nitrogen, Nitrite	mg/L as N	0.002	0.20	0.50	0.547	0.001	0.779	0.675 to 0.825	109	90 to 110	0.00	15
BA03155	Fluoride	mg/L	0.0245	0.05	2.50	2.51	0.0155	2.54	2.25 to 2.75	100	80 to 120	0.00	20
BA03155	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.20	2.00	2.00	0.035	1.98	1.8 to 2.2	100	90 to 110	0.00	15

Comments:

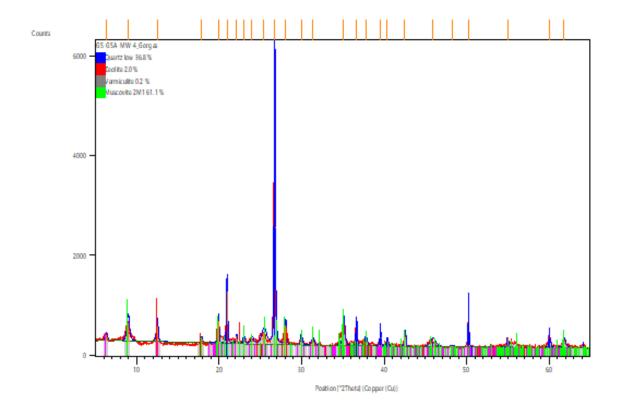
Reported: 3/18/2020 Version: 3.1 COA_CCR



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
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

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6	5-65A-MW4			1130	5									52	
6	5-65A-MW-4	Dup		1130	5	1	P	LAH						53	
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Graphics

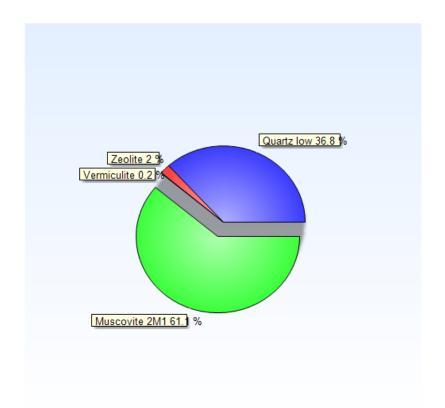


Peak List

Pos.[°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
6.3296	13.96420	2.35	96-900-0010
8.9867	9.84045	7.75	98-009-0144;98
12.5041	7.07917	6.74	98-017-0517;96
17.8767	4.96189	1.94	98-017-0517;98
19.9220	4.45686	9.72	98-009-0144;96
20.9421	4.24202	21.96	98-002-7826;98
22.1157	4.01949	3.06	98-009-0144;96
22.9982	3.86720	2.86	98-009-0144;96
23.9919	3.70923	1.93	98-009-0144;98
25.4355	3.50190	4.66	98-009-0144;96
26.7267	3.33558	100.00	98-002-7826;98
28.0339	3.18294	8.19	98-017-0517;96
29.9545	2.98309	3.77	98-009-0144;98
31.3473	2.85366	2.13	98-009-0144;96
35.0751	2.55844	9.25	98-009-0144;96
36.6315	2.45323	10.97	98-002-7826;98
37.7670	2.38205	3.13	98-017-0517;98
39.5283	2.27987	7.08	98-002-7826;98
40.3670	2.23442	3.38	98-002-7826;98
42.5165	2.12630	6.23	98-002-7826;98
45.8888	1.97759	2.80	98-002-7826;98

48.2217	1.88723	0.46	98-009-0144;96
50.1985	1.81744	11.34	98-002-7826;98
54.9487	1.67104	3.94	98-002-7826;98
60.0158	1.54151	6.83	98-002-7826;98
61.7991	1.50124	3.36	98-009-0144;96

Quantitative Results



Phase Quartz low: Weight fraction/ %: 36.8
Phase Zeolite: Weight fraction/ %: 2.0
Phase Vermiculite: Weight fraction/ %: 0.17
Phase Muscovite 2M1: Weight fraction/ %: 61

Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-002-7826	72	Quartz low	O2 Si1
98-017-0517	27	Zeolite	02 Si1
96-900-0010	28	Vermiculite	Mg12.00 Si16.00 O4
98-018-0082	43	Muscovite/Illite	H1.834 Al2.724 F0

Anchor Scan Parameters

Sample Identification:

Comment:

Dataset Name: GS-GSA-MW-4_Gorgas

File name:

 $C: \label{local-condition} C: \label{local-con$

A-MW-4_Gorgas.rd GS-GSA-MW-4 Gorgas Exported by X'Pert SW

Generated by hugo in project AnchorQEA_2

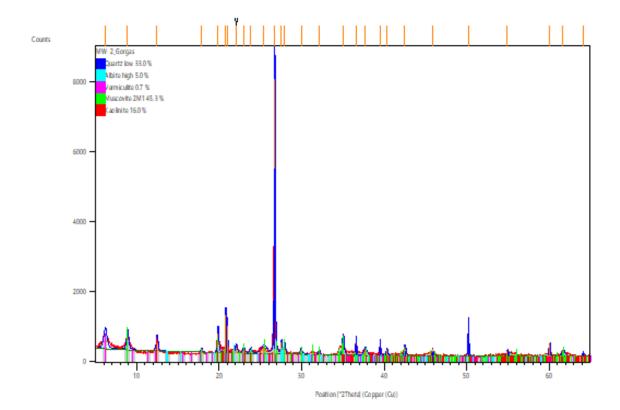
Measurement Date / Time: 3/19/2020 9:33:00 AM
Raw Data Origin: PHILIPS-binary (scan) (.RD)

Scan Axis: Gonio Start Position [°2Th.]: 5.0125 End Position [o2Th.]: 64.9875 Step Size [°2Th.]: 0.0250 Scan Step Time [s]: 2.5000 Scan Type: Continuous Offset [°2Th.]: Divergence Slit Type: 0.0000 Fixed Divergence Slit Size [°]: 0.5000 Specimen Length [mm]: 10.00

Receiving Slit Size [mm]: 0.1000 Measurement Temperature [°C]: 0.00 Anode Material: Cu K-Alpha1 [Å]: 1.54060 K-Alpha2 [Å]: 1.54443 K-Beta [Å]: 1.39225 0.50000 K-A2 / K-A1 Ratio: Generator Settings: 30 mA, 40 kV Diffractometer Type: XPert MPD

Diffractometer Number: 1
Goniometer Radius [mm]: 200.00
Dist. Focus-Diverg. Slit [mm]: 91.00
Incident Beam Monochromator: No
Spinning: No

Graphics

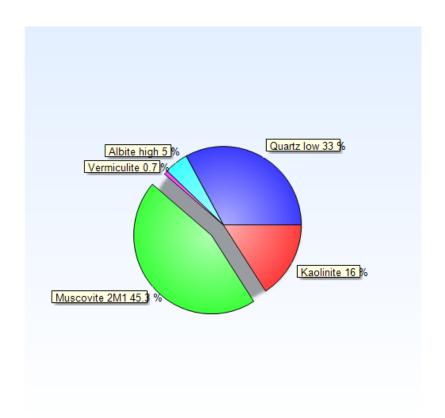


Peak List

Pos [°2Th]	d-spacing [Å]	Rel. Int. [%]	Matched by
6.2087	14.23591	5.17	98-016-6064
8.9124	9.92241	5.01	98-009-0144;98
12.4855	7.08965	4.00	98-016-6064;96
17.8576	4.96715	1.06	98-016-6064;98
19.8860	4.46485	7.07	98-009-0144;98
20.8099	4.26865	13.81	98-002-9210;98
20.9724	4.23596	10.06	98-002-9210;98
22.0728	4.02719	2.31	
22.9619	3.87324	1.48	98-010-0505;98
23.8425	3.73214	1.42	98-010-0505;98
25.4332	3.50220	2.16	98-016-6064;98
26.7364	3.33439	100.00	98-002-9210;98
27.5733	3.23506	4.38	98-010-0505;98
27.9589	3.19131	3.11	98-010-0505;98
29.9251	2.98596	1.92	98-010-0505;98
32.1102	2.78758	1.30	98-009-0144;98
35.0080	2.56319	5.92	98-016-6064;98
36.5938	2.45568	4.75	98-002-9210;98
37.7031	2.38593	2.16	98-016-6064;98
39.4957	2.28168	3.75	98-002-9210;98
40.3269	2.23655	2.08	98-002-9210;98

42.5067	2.12676	3.33	98-002-9210;98
45.8715	1.97829	2.91	98-002-9210;98
50.1881	1.81780	9.16	98-002-9210;98
54.9213	1.67181	1.93	98-002-9210;98
59.9964	1.54068	4.46	98-002-9210;98
61.6809	1.50383	1.90	98-010-0505;98
64.0796	1.45321	0.86	98-002-9210;98

Quantitative Results



Phase Quartz low: Weight fraction/ %: 33.0
Phase Albite high: Weight fraction/ %: 5
Phase Vermiculite: Weight fraction/ %: 0.75
Phase Muscovite 2M1: Weight fraction/ %: 45
Phase Kaolinite: Weight fraction/ %: 16

Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-002-9210	67	Quartz low	O2 Si1
98-010-0505	16	Albite high	Al1 Na1 O8 Si3
98-016-6064	26	Vermiculite	H10.8 Al2.94 Ca0.0
98-018-0082	46	Muscovite/Illite	H1.834 Al2.724 F0
96-900-9235	21	Kaolinite	Al2.00 Si2.00 09.0

Anchor Scan Parameters

Dataset Name: MW-2_Gorgas

File name:

C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\2020_March\MW-2

_Gorgas.rd MW-2 Gorgas

Sample Identification:

Exported by X'Pert SW Comment:

Generated by hugo in project AnchorQEA_2

3/17/2020 3:29:00 PM

Measurement Date / Time: PHILIPS-binary (scan) (.RD) Raw Data Origin:

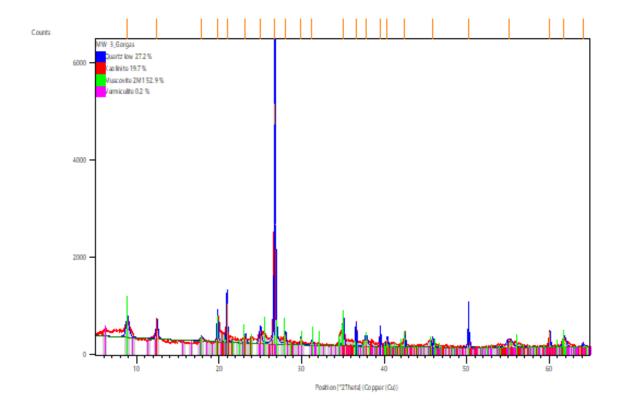
Scan Axis: Gonio Start Position [°2Th.]: 5.0125 End Position [o2Th.]: 64.9875 Step Size [°2Th.]: 0.0250 Scan Step Time [s]: 2.5000 Scan Type: Continuous Offset [°2Th.]: Divergence Slit Type: 0.0000 Fixed Divergence Slit Size [°]: 0.5000 Specimen Length [mm]: 10.00

Receiving Slit Size [mm]: 0.1000 Measurement Temperature [°C]: 0.00 Anode Material: Cu K-Alpha1 [Å]: 1.54060 K-Alpha2 [Å]: 1.54443 K-Beta [Å]: 1.39225 0.50000 K-A2 / K-A1 Ratio:

Generator Settings: 30 mA, 40 kV Diffractometer Type: XPert MPD

Diffractometer Number: Goniometer Radius [mm]: 200.00 Dist. Focus-Diverg. Slit [mm]: 91.00 Incident Beam Monochromator: No Spinning: No

Graphics

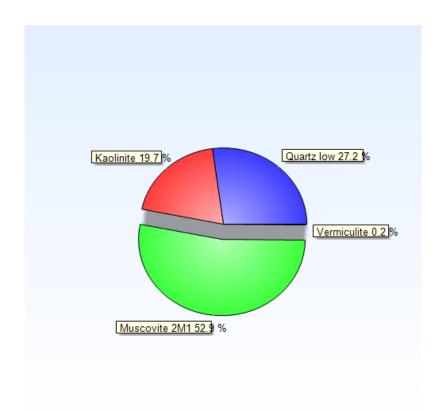


Peak List

-0			
Pos.[~2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
8.9032	9.93258	6.23	98-009-0144;98
12.4723	7.09712	5.94	96-900-9235;98
17.8535	4.96827	1.57	98-009-0144;98
19.8164	4.48036	9.95	98-009-0144;98
20.9404	4.24234	16.32	98-002-9210;98
23.2053	3.83316	3.18	96-900-9235
24.9942	3.56272	5.29	98-009-0144;98
26.7591	3.33161	100.00	98-002-9210;98
28.0064	3.18601	4.01	98-018-0082;96
29.9215	2.98631	3.02	98-009-0144;98
31.2470	2.86259	1.62	98-009-0144;98
35.0295	2.56167	9.94	98-009-0144;98
36.5876	2.45607	9.42	98-002-9210;98
37.7760	2.38150	3.51	98-009-0144;98
39.5123	2.28076	8.40	98-002-9210;98
40.3520	2.23522	3.42	98-002-9210;98
42.4917	2.12748	6.74	98-002-9210;98
45.8617	1.97869	3.65	98-002-9210;98
50.2087	1.81710	9.16	98-002-9210;98
55.1596	1.66515	2.53	98-002-9210;98
60.0303	1.54117	6.69	98-002-9210;98

61.7968	1.50129	3.49	98-009-0144;98
64.1123	1.45254	0.95	98-002-9210;98

Quantitative Results



Phase Quartz low:Weight fraction/ %:27.2(4)Phase Kaolinite:Weight fraction/ %:20(1)Phase Muscovite 2M1:Weight fraction/ %:53(1)Phase Vermiculite:Weight fraction/ %:0.24(4)

Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-002-9210	65	Quartz low	02 Si1
98-018-0082	36	Muscovite/Illite	H1.834 Al2.724 F0
96-900-9235	28	Kaolinite	Al2.00 Si2.00 09.0
98-016-6064	9	Vermiculite	H10.8 Al2.94 Ca0.0

Anchor Scan Parameters

Dataset Name: MW-3_Gorgas

File name:

_Gorgas.rd MW-3 Gorgas

Sample Identification: MW-3 Gorgas

Comment: Exported by X'Pert SW

Generated by hugo in project Maynard.

Measurement Date / Time: 3/16/2020 10:16:00 AM Raw Data Origin: PHILIPS-binary (scan) (.RD)

 Scan Axis:
 Gonio

 Start Position [°2Th.]:
 5.0125

 End Position [°2Th.]:
 64.9875

 Step Size [°2Th.]:
 0.0250

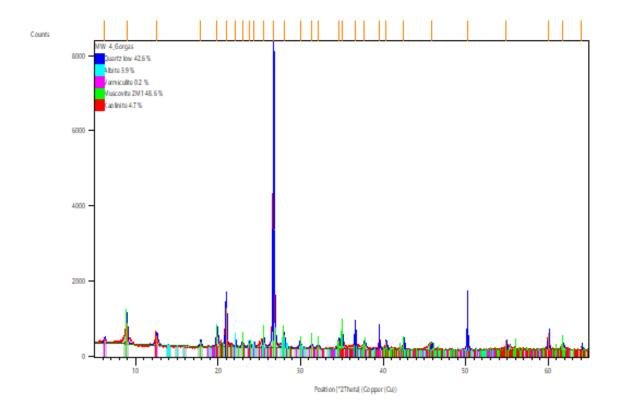
 Scan Step Time [s]:
 2 5000

Step Size [°2Th.]: Scan Step Time [s]: 2.5000 Scan Type: Continuous Offset [°2Th.]: Divergence Slit Type: 0.0000 Fixed Divergence Slit Size [°]: 0.5000 Specimen Length [mm]: 10.00 Receiving Slit Size [mm]: 0.1000 Measurement Temperature [°C]: 0.00 Anode Material: Cu K-Alpha1 [Å]: 1.54060 K-Alpha2 [Å]: 1.54443

K-Beta [Å]: 1.39225
K-A2 / K-A1 Ratio: 0.50000
Generator Settings: 30 mA, 40 kV
Diffractometer Type: XPert MPD

Diffractometer Number: 1
Goniometer Radius [mm]: 200.00
Dist. Focus-Diverg. Slit [mm]: 91.00
Incident Beam Monochromator: No
Spinning: No

Graphics

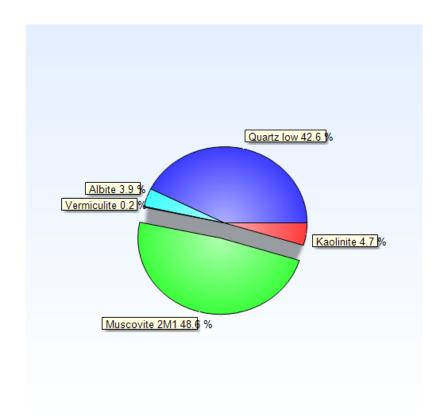


Peak List

0 -			
Pos.[°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
6.2677	14.10196	1.81	98-015-9384
8.9622	9.86732	9.06	98-018-0082;98
12.5702	7.04209	3.57	98-015-9384;96
17.8777	4.96163	2.10	98-018-0082;98
19.8796	4.46626	6.00	98-015-9384;98
20.9678	4.23686	16.39	98-002-9210;98
22.0894	4.02421	3.10	96-900-1633;98
22.9551	3.87437	1.61	96-900-1633;98
23.7768	3.74231	1.75	96-900-1633;98
24.3525	3.65512	1.81	96-900-1633;98
25.5251	3.48981	3.55	96-900-1633;98
26.7264	3.33561	100.00	98-002-9210;96
27.9935	3.18745	5.47	96-900-1633;98
29.9527	2.98327	2.83	98-018-0082;98
31.3181	2.85625	1.83	96-900-1633;98
32.1201	2.78674	1.32	96-900-1633;98
34.6084	2.59186	3.81	98-015-9384;98
35.0071	2.56325	7.64	96-900-1633;98
36.6121	2.45449	8.21	98-002-9210;96
37.7210	2.38485	2.44	96-900-1633;98
39.5181	2.28044	5.08	98-002-9210;96

40.3703	2.23425	3.69	98-002-9210;96
42.5045	2.12687	5.27	98-002-9210;96
45.8779	1.97803	3.23	98-002-9210;96
50.1916	1.81768	9.05	98-002-9210;96
54.9243	1.67173	3.88	98-002-9210;96
60.0006	1.54186	7.18	98-002-9210;98
61.7628	1.50203	2.46	96-900-1633;98
64.0676	1.45345	1.25	98-002-9210;98

Quantitative Results



Phase Quartz low: Weight fraction/ %: 42.6
Phase Albite: Weight fraction/ %: 3.9
Phase Vermiculite: Weight fraction/ %: 0.18
Phase Muscovite 2M1: Weight fraction/ %: 49
Phase Kaolinite: Weight fraction/ %: 4.7

Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-002-9210	66	Quartz low	O2 Si1
96-900-1633	22	Albite	Na2.00 Al2.00 Si6
98-015-9384	29	Vermiculite	H3 Al1 Mg3 O12 Si3
98-018-0082	46	Muscovite/Illite	H1.834 Al2.724 F0
96-900-9235	15	Kaolinite	Al2.00 Si2.00 09.0

Anchor Scan Parameters

Dataset Name: MW-4_Gorgas

File name:

_Gorgas.rd

Sample Identification: MW-4 Gorgas

Exported by X'Pert SW Comment:

Generated by hugo in project AnchorQEA_2

3/16/2020 1:37:00 PM

Measurement Date / Time: PHILIPS-binary (scan) (.RD) Raw Data Origin:

Scan Axis: Gonio Start Position [°2Th.]: 5.0125 End Position [o2Th.]: 64.9875 Step Size [°2Th.]: 0.0250 Scan Step Time [s]: 2.5000 Scan Type: Continuous Offset [°2Th.]: Divergence Slit Type: 0.0000 Fixed Divergence Slit Size [°]: 0.5000

Specimen Length [mm]: 10.00 Receiving Slit Size [mm]: 0.1000 Measurement Temperature [°C]: 0.00 Anode Material: Cu K-Alpha1 [Å]: 1.54060 K-Alpha2 [Å]: 1.54443 K-Beta [Å]: 1.39225 0.50000 K-A2 / K-A1 Ratio: Generator Settings: 30 mA, 40 kV

Diffractometer Type: XPert MPD Diffractometer Number: Goniometer Radius [mm]: 200.00 Dist. Focus-Diverg. Slit [mm]: 91.00 Incident Beam Monochromator: No Spinning: No

Site ID	SAMPLE ID	Units	Al	Al Error	As	As Error	Bal	Bal Error	Ca	Ca Error	Ce	Ce Error	CI	Cl Error	Co	Co Error	Fe	Fe Error	K	K Error	La	La Error	Mg	Mg Error	Mn
Gorgas	GS-AP-MW-12	ppm	5223	1537	10	4	658379	1443	214200	1300	< LOD	34	313	125	< LOD	61	3887	219	1992	128	< LOD	35	12895	7124	< LOD
Gorgas	GS-AP-MW-18	ppm	26116	1729	27	5	667313	1550	65201	759	67	30	361	103	< LOD	135	41967	438	19366	326	< LOD	44	10101	5099	< LOD
Gorgas	GS-AP-MW-6D	ppm	5959	709	4	3	751161	1003	1942	75	43	21	2414	98	< LOD	62	5582	232	3863	102	< LOD	32	< LOD	3237	< LOD
Gorgas	GS-AP-MW-6D DUP	ppm	22028	1326	23	4	686439	1307	1748	136	< LOD	33	< LOD	130	< LOD	116	37766	351	17226	291	< LOD	33	< LOD	6009	< LOD
Gorgas	GS-AP-MW-7	ppm	4571	615	11	3	745782	1004	8632	145	< LOD	30	< LOD	99	< LOD	54	2645	212	2381	79	< LOD	45	< LOD	3180	< LOD
Gorgas	GS-AP-MW-8	ppm	3032	1261	133	14	478263	3742	1187	165	< LOD	107	507	78	< LOD	421	480856	3690	< LOD	393	< LOD	94	< LOD	12481	< LOD
Gorgas	GS-GSA-MW-3	ppm	34409	1577	30	5	734608	1196	3943	202	< LOD	36	< LOD	134	< LOD	130	47819	417	25023	388	< LOD	36	< LOD	4931	< LOD
Gorgas	GS-GSA-MW-4	ppm	28215	1363	31	5	745155	1104	1808	152	< LOD	35	< LOD	121	< LOD	118	40853	362	23068	347	< LOD	35	< LOD	5397	< LOD
Gorgas	MW-1	ppm	12520	868	15	3	747370	1031	954	92	45	24	222	68	< LOD	100	26024	298	9787	194	< LOD	35	< LOD	3433	3643
Gorgas	MW-12	ppm	17301	1079	69	5	719563	1143	1461	115	< LOD	37	429	78	< LOD	113	38254	347	11331	231	< LOD	35	< LOD	7068	< LOD
Gorgas	MW-13	ppm	20751	1146	19	4	737746	1080	1152	110	62	25	< LOD	148	< LOD	104	30554	317	15234	249	56	24	< LOD	7040	< LOD
Gorgas	MW-14	ppm	20633	1084	19	4	755561	1011	1261	108	< LOD	31	214	73	< LOD	97	27298	292	13929	240	< LOD	31	< LOD	5145	< LOD
Gorgas	MW-2	ppm	12807	880	7	3	737770	1115	1341	80	78	23	324	74	< LOD	76	9873	263	8720	161	48	22	< LOD	3772	< LOD
Gorgas	MW-3	ppm	19643	1015	15	4	761934	988	1067	90	< LOD	32	< LOD	98	< LOD	80	16104	255	13226	208	< LOD	30	< LOD	5280	< LOD
Gorgas	MW-3 DUP	ppm	19841	1007	9	4	757881	1002	997	91	< LOD	31	< LOD	98	< LOD	81	16150	255	13365	210	< LOD	31	< LOD	3559	< LOD
Gorgas	MW-4	ppm	27215	1364	16	4	723095	1218	1418	150	82	28	< LOD	114	< LOD	132	50502	425	22569	354	92	28	5435	3482	< LOD
Gorgas	MW-6	ppm	22071	1308	27	4	686916	1323	1692	137	< LOD	33	< LOD	192	< LOD	118	38009	353	17233	297	< LOD	33	< LOD	4928	< LOD

Site ID	SAMPLE ID	Units	Mn Error	Мо	Mo Error	Nb	Nb Error	Nd	Nd Error	Р	P Error	Pr	Pr Error	S	S Error	Se	Se Error	Si	Si Error	Ti	Ti Error	Zn	Zn Error	Zr	Zr Error
Gorgas	GS-AP-MW-12	ppm	921	10	2	3	2	< LOD	59	1862	429	< LOD	44	584	167	< LOD	3	95472	1835	< LOD	1407	< LOD	11	< LOD	7
Gorgas	GS-AP-MW-18	ppm	1615	25	3	9	2	< LOD	93	3434	403	< LOD	62	4005	200	< LOD	3	150128	1964	5121	1649	94	11	104	7
Gorgas	GS-AP-MW-6D	ppm	1000	< LOD	2	3	1	< LOD	52	3452	342	< LOD	55	1609	117	< LOD	2	221937	1915	1795	529	< LOD	8	102	2
Gorgas	GS-AP-MW-6D DUP	ppm	966	15	2	16	2	< LOD	55	4457	407	< LOD	42	2575	158	< LOD	2	221008	2118	5794	1310	137	11	277	4
Gorgas	GS-AP-MW-7	ppm	935	2	1	< LOD	2	< LOD	50	3080	312	< LOD	38	996	95	< LOD	2	230804	1810	898	420	< LOD	7	65	2
Gorgas	GS-AP-MW-8	ppm	1321	< LOD	5	< LOD	4	< LOD	183	8420	335	< LOD	132	295	99	< LOD	7	26696	829	< LOD	2804	< LOD	27	6	3
Gorgas	GS-GSA-MW-3	ppm	1445	6	2	16	2	< LOD	61	3621	350	< LOD	46	3752	175	< LOD	2	139238	1810	6057	1623	275	15	153	3
Gorgas	GS-GSA-MW-4	ppm	1005	12	2	16	2	< LOD	58	3271	328	< LOD	44	2205	140	< LOD	3	148230	1759	5841	1462	126	11	186	4
Gorgas	MW-1	ppm	654	25	2	6	1	< LOD	59	3124	310	< LOD	45	611	95	< LOD	2	191704	1768	3135	913	85	9	138	3
Gorgas	MW-12	ppm	1148	60	2	11	2	< LOD	59	3277	337	< LOD	45	2035	128	< LOD	2	201106	1899	3629	1094	126	10	208	4
Gorgas	MW-13	ppm	1012	13	2	11	1	< LOD	60	3137	326	< LOD	58	5616	177	< LOD	2	180414	1796	4212	1103	107	10	166	3
Gorgas	MW-14	ppm	937	17	2	11	1	< LOD	52	2991	310	< LOD	39	7554	195	< LOD	2	165795	1704	3755	1105	131	10	136	3
Gorgas	MW-2	ppm	1079	10	2	21	2	< LOD	72	6786	3506	< LOD	45	880	248	< LOD	2	216116	2100	3800	761	16	7	1063	9
Gorgas	MW-3	ppm	946	11	2	8	1	< LOD	50	3360	307	< LOD	38	4168	150	< LOD	2	176073	1711	3683	913	51	8	144	3
Gorgas	MW-3 DUP	ppm	942	11	2	8	1	< LOD	51	3184	308	< LOD	39	4321	152	< LOD	2	179816	1729	3759	918	45	8	145	3
Gorgas	MW-4	ppm	1378	11	2	15	2	144	47	3228	330	106	35	445	107	< LOD	2	158726	1831	5738	1480	136	11	208	4
Gorgas	MW-6	ppm	952	17	2	15	2	< LOD	56	3960	399	< LOD	42	2426	155	< LOD	2	221116	2126	5532	1343	137	12	275	4





Anthony Dalton-Atha Anchor QEA, LLC 6720 SW Macadam Avenue Suite 125 Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020 For your reference, these analyses have been assigned our service request number **K2004421**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

noe D. Oar

ALS Group USA, Corp. dba ALS Environmental

Mark Harris

Project Manager

dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com



Client: Anchor QEA, LLC Service Request: K2004421

Project: APC SSE Date Received: 05/29/2020

Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The sample was stored at minimum in accordance with the analytical method requirements.

Metals:

Method 6010C, 06/19/2020: Samples in this delivery group required dilution to non-target matrix components. Attempts to analyze the undiluted samples resulted in failed instrument QC check samples. The detection limits were elevated accordingly. No further corrective action was appropriate.

Approved by

Moe D. Daw

Approved by

Date 06/22/2020



Sample Receipt Information

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com



Cooler Receipt and Preservation Form

Client An	VCHOR I	OFA		HEF KECE	-					004	471		
Received: 5	/29/202	20 Oper	ned: 5/29	/2020	В	iv:	<u> </u>	JO 1101	Unloade	d: 5/2	29/2020 By	· CG	***************************************
 Samples w Samples w 	vere received vere received ody seals on	l via? <i>US</i> l in: (circle)	SPS Fed Cooler NA	Ex U	PS	DHI Envelo	L pe	PDX Ot	Couri her	हेर H	and Delivered Fron +	NA.	
If present,	were custod	y seals intac	t?	Ø 1	N				ere they s			Ý	N
Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	1	R GUN	Co	oler/(COC 1D (1	VA)	Tracking Numb	er NA	Filed
	10.7	12.0	10.6	9.6	IK	202							
4. Packing m	naterial: <i>In</i>	serts Bagg	ies Bubble	e Wrap y	Gel Pa	icks (1	Vet Ic	e) Di	y Ice S	Sleeves			
5. Were cust	tody papers p	oroperly fille	d out (ink, si	gned, etc.) perature, u	? nbroke	en)? In	dicate	in the	: table bei	low.	N/	_) N
	•	complete (i.	ole, tissue san e analysis, pr e with custod	reservation	ı, etc.)'	?	Froz or dis		Partially ucies in th		Thawed No. 10 Page 2. No. 10 N	\sim) N
9. Were appr	ropriate bottl	les/container	rs and volume e SMO GEN S	es received	l for th	ne tests i	ndica	ted?			N/	A OF	_
11. Were VO		ived without	e SMO GEN S t headspace?					e pri	inaicule	in ine id	iole delow N	Y Y	N N
	mple ID on Bo			Sampi	e ID on	COC					identified by:		

5	Sample ID		Bottle Count Bottle Type	Out of Temp		Broke	pН	Re	agent	Volume added	Reagent Lot Number	Initials	Time
A(("F	"2" Samp	oles 1.	-125ml, ede	the state of			X	HN	03	0.5ml	RE154C	06	1100 Glyko
Notes, Discr	repancies, &	Resolutio	ns: Temp	rokay	^	rete	/5 (Ma	yses		L		<u> </u>
			•										

Ĺ							8.5	Sang san	(na sessi)	55,55	4.77			Paran	neter	\$	Andrews A				******	⊥	CHOR	
	Date:		5/29/2020																		Z AN OE	٨٣		
	Project Name:	APC SSE																		1		Jessica Goin		
	Project Manager:	Anthony Dalton-A	tha			1														ı		6720 SW Mac	adam Ave	
	email:	adalton-atha@	anchorgea.	com		2																Suite 125		
	Phone Number:	541-760-0851				Containers													ļ			Portland OR 9	7219	
Sh	ipment Method:	Courier				ē				ᇣ									1					
			Collect	ion	I	ğ	į	Ę	j.	rbde										ł				
Line	Field S	ample ID	Date	Time	Matrix	ĝ	Arsenic	Lithium	Cobalt	Molybdenum	<u>0</u>										l	Comments/	Preservation	
16	GS-AP-MW-8_F4_	_016			Water	1	x	х		x	Х											nitric acid		
17	MR-AP-MW-3D_F	4_017			Water	1	х	х	х		х											nitric acid		
18	MR-AP-MW-4_F4	_018			Water	1	х	х	х		х			***************************************								nitric acid		
19	MR-AP-MW-5_F4	_019			Water	1	х	х	х		X											nitric acid		
20	MW-1_F4_020				Water	1	х	х		х	х											nitric acid		
21	MW-12_F4_021				Water	1	х	х		х	x											nitric acid		
22	Blank_F4_022				Water	1	Х	х	х	х	X											nitric acid		
23	OLD-MW-2D-F4_	012_DUP	2_DUP Water				Х	х		х	х											nitric acid		
Notes:	CAUTIONI F4 samp	les are concentrated	(16N) nitric acid	l								·····	····			***************************************	····	***************************************					***************************************	
	- 4 4 4							***************************************			······································													
Relinqi	uished by:			Compan								Recei	ved by	\Rightarrow			-	\overline{a}				mpany:		
		ny Dalton-Atha				incho	QEA						<u> </u>			متعيم المفاقعين المعاديد		25/	NO	20		15		
Signati	ure/Print Name:			Date/Tin								Signa	ture/P	rint N	ame:						Da /	te/Time:		
					5/2	9/202	0 10:0	00			1			***************************************	***************************************						5/	29/20 11	45	
Relinq	uished by:			Compan	y:							Recei	ved by	/:				***************************************			Co	mpany:		**********
Signati	ure/Print Name:			Date/Tin	ne:							Signa	ture/P	rint N	ame:						Da	te/Time:		
	**																							
				Distributio	on: A copy wil	l be ma	de for ti	he labor	atory ar	nd client	. The P	roject fil	le will re	tain the	e origina	rl,						Da	na of	

Chain of Custody Record & Laboratory Analysis Request



Miscellaneous Forms

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- F. The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- \boldsymbol{Q} $\;\;$ See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection

LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.



Sample Results

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com



Metals

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004421 **Date Collected:** 05/28/20 10:45 **Project:** APC SSE **Sample Matrix:** Water

Date Received: 05/29/20 11:45

Sample Name: Blank_F4_022 Basis: NA

Lab Code: K2004421-011

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/19/20 17:56	06/09/20	
Cobalt	6010C	ND U	ug/L	2.1	0.7	1	06/19/20 17:56	06/09/20	
Iron	6010C	21 J	ug/L	42	8	1	06/19/20 17:56	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/19/20 17:56	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/19/20 17:56	06/09/20	



QC Summary Forms

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com



Metals

Analytical Report

Client: Anchor QEA, LLC

Project:APC SSEDate Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

Lab Code: KQ2007746-02

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/19/20 16:24	06/09/20	
Cobalt	6010C	ND U	ug/L	2.1	0.7	1	06/19/20 16:24	06/09/20	
Iron	6010C	ND U	ug/L	42	8	1	06/19/20 16:24	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/19/20 16:24	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/19/20 16:24	06/09/20	

Service Request: K2004421

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Service Request: Date Collected:

K2004421

Date Conecteu:

05/28/20

Date Received:

05/29/20

Date Analyzed: Date Extracted: 06/19/20 06/9/20

Matrix Spike Summary Total Metals

OLD-MW-2D_F4_012

K2004421-001

Analysis Method: 6010C

Prep Method:

Sample Name:

Lab Code:

EPA CLP ILM04.0

Units: Basis: ug/L NA

Matrix Spike

KQ2007746-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	960	1000	96	75-125
Cobalt	74	513	500	88	75-125
Iron	1050000	1020000	1000	-2168 #	75-125
Lithium	ND U	9900	10000	99	75-125
Molybdenum	ND U	952	1000	95	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Printed 7/20/2020 11:05:55 AM

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Water

Project APC SSE

Sample Matrix:

Sample Name:

Analyte Name

Arsenic

Cobalt

Lithium

Molybdenum

Iron

Lab Code:

 QEA, LLC
 Service Request:
 K2004421

 E
 Date Collected:
 05/28/20

Date Received: 05/29/20

Date Analyzed: 06/19/20

Replicate Sample Summary Total Metals

Sample

Result ND U

74

1050000

ND U

ND U

OLD-MW-2D_F4_012

MRL

210

11

110

110

84

MDL

50

4

40

30

21

Units: ug/L

Basis: NA

20

20

K2004421-001

Analysis

Method

6010C

6010C

6010C

6010C

6010C

Duplicate

ND U

ND U

Sample KQ2007746-03 Result	Average	RPD	RPD Limit
ND U	ND	-	20
76	75	3	20
1050000	1050000	<1	20

ND

ND

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 7/20/2020 11:05:55 AM

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE

Sample Matrix: Water

Service Request: K2004421 Date Analyzed: 06/19/20

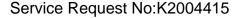
Lab Control Sample Summary Total Metals

Units:ug/L Basis:NA

Lab Control Sample

KQ2007746-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	2540	2500	102	80-120
Cobalt	6010C	1190	1250	95	80-120
Iron	6010C	2340	2500	93	80-120
Lithium	6010C	9940	10000	99	80-120
Molybdenum	6010C	1010	1000	101	80-120





Anthony Dalton-Atha Anchor QEA, LLC 6720 SW Macadam Avenue Suite 125 Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020 For your reference, these analyses have been assigned our service request number **K2004415**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

noe D. Oar

ALS Group USA, Corp. dba ALS Environmental

Mark Harris

Project Manager

dba ALS Environmental



Narrative Documents



Client: Anchor QEA, LLC Service Request: K2004415

Project: APC SSE Date Received: 05/29/2020

Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by

Approved by

Date 06/15/2020



Sample Receipt Information

Chain of Custody Record & Laboratory Analysis Request Parameters ANCHOR QEA Date: 5/29/2020 Project Name: APC SSE Jessica Goin Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave email: adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier ŏ Lithium Collection Arsenic Field Sample ID Line Matrix Date Time Comments/Preservation 1 BY-AP-MW-11_F1_001 5/26/2020 9:00 Water 1 х х nitric acid 2 BY-AP-MW-12_F1_002 5/26/2020 9:05 Water х х nitric acid 3 BY-AP-MW-13_F1_003 5/26/2020 9:10 Water х nitric acid Х 4 BY-AP-MW-2_F1_004 5/26/2020 9:15 Water х Х nitric acid 5 BY-AP-MW-7_F1_005 5/26/2020 9:20 Water х х nitric acid 6 BY-AP-MW-9_F1_006 5/26/2020 9:25 Water х х nitric acid GC-AP-MW-1_F1_007 5/26/2020 9:30 Water х х Х nitric acid 8 GC-AP-MW-11_F1_008 5/26/2020 9:35 Water х X х nitric acid 9 GC-AP-MW-16_F1_009 5/26/2020 9:40 Water х nitric acid Х Х 10 OLD-MW-115_F1_010 5/26/2020 9:45 Water х Χ х nitric acid 11 OLD-MW-11_F1_011 5/26/2020 9:50 Water Х Х х nitric acid 12 OLD-MW-2D_F1_012 5/26/2020 9:55 Water Х х х nitric acid 13 GC-AP-MW-17_F1_013 5/26/2020 10:00 Water nitric acid Х Х X 14 GN-AP-MW-5_F1_014 5/26/2020 10:05 Water х х х nitric acid 15 GS-AP-MW-6D_F1_015 5/26/2020 10:10 Water nitric acid х Х Х Notes:

Relinquished by:	Company:	Received by:	Company:
Anthony Daiton-Atha	Anchor QEA	S subzr	A25
ignature/Print Name:	Date/Time:	Signatore/Print Name:	Date/Time:
	5/29/2020 10:00		tot. 5/29/20 1149
Relinquished by:	Company:	Received by:	Company:
ignature/Print Name:	Date/Time:	Signature/Print Name:	Date/Time:

Chain of Custody Record & Laboratory Analysis Request Parameters ANCHOR OEA Date: 5/29/2020 Project Name: APC SSE Jessica Goin Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave email: adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier No. of Lithium Collection Cobalt Field Sample ID Line Matrix Time Date Comments/Preservation 16 GS-AP-MW-8_F1_016 5/26/2020 10.15 Water 1 х х х nitric acid MR-AP-MW-3D_F1_017 17 5/26/2020 10:20 Water х х nitric acid MR-AP-MW-4_F1_018 5/26/2020 10:25 nitric acid Water 1 Х Х X 19 MR-AP-MW-5_F1_019 5/26/2020 10:30 Water 1 х Х х nitric acid 20 MW-1_F1_020 5/26/2020 10:35 Water х х Х nitric acid MW-12_F1_021 5/26/2020 10:40 Water х X х nitric acid 22 Blank_F1_022 5/26/2020 10:45 Water х Х X Х nitric acid 23 OLD-MW-2D-F1_012_DUP 5/26/2020 10:50 Water х х х nitric acid Notes: Relinquished by: Company: Company: Received by: Anthony Dalton-Atha Anchor QEA Signature/Print Name: Date/Time: Signature/Print Name: Date/Time: 5/29/2020 10:00 Relinquished by: Company: Received by: Company: Signature/Print Name: Date/Time: Signature/Print Name: Date/Time:



~ _____

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Miscellaneous Forms

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- F. The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- \boldsymbol{Q} $\;\;$ See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection

LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.



Sample Results



Metals

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004415 **Date Collected:** 05/26/20 10:10 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: GS-AP-MW-6D_F1_015 Basis: NA

Lab Code: K2004415-015

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	\mathbf{MDL}	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/11/20 15:21	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/11/20 15:21	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/11/20 15:21	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Water

Project: APC SSE **Service Request:** K2004415 **Date Collected:** 05/26/20 10:15

Date Received: 05/29/20 11:45

Sample Name:

Sample Matrix:

Lab Code:

GS-AP-MW-8_F1_016

K2004415-016

Basis: NA

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/11/20 15:36	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/11/20 15:36	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/11/20 15:36	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004415 **Date Collected:** 05/26/20 10:35 **Project:** APC SSE

Date Received: 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: MW-1_F1_020 Basis: NA

Lab Code: K2004415-020

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/11/20 15:46	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/11/20 15:46	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/11/20 15:46	06/09/20	



QC Summary Forms



Metals

Analytical Report

Anchor QEA, LLC **Client:**

Date Collected: NA **Project:** APC SSE **Sample Matrix:** Water

Date Received: NA

Service Request: K2004415

Basis: NA **Sample Name:** Method Blank

Lab Code: KQ2007740-02

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/11/20 14:18	06/09/20	
Cobalt	6010C	ND U	ug/L	2.1	0.7	1	06/11/20 14:18	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/11/20 14:18	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/11/20 14:18	06/09/20	

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Service Request:
Date Collected:

K2004415

Date Received:

05/26/20 05/29/20

Date Analyzed:

06/11/20

Date Extracted:

06/9/20

Matrix Spike Summary Total Metals

BY-AP-MW-11_F1_001

Units:

ug/L NA

Lab Code: K2004415-001

Analysis Method: 6010C

Prep Method: If

Sample Name:

EPA CLP ILM04.0

Matrix Spike KQ2007740-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits	
Arsenic	13 J	861	1000	85	75-125	
Cobalt	0.9 J	440	500	88	75-125	
Lithium	ND U	9360	10000	94	75-125	
Molvbdenum	10.8	1010	1000	100	75-125	

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Printed 7/20/2020 11:01:01 AM

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Project APC SSE

Sample Matrix:

Lab Code:

Service Request: K2004415

Date Collected: 05/26/20 **Date Received:** 05/29/20

Date Analyzed: 06/11/20

Replicate Sample Summary

Total Metals

Sample Name: BY-AP-MW-11_F1_001

Water

Units: ug/L

Basis: NA

K2004415-001

Duplicate

_	
Sam	ple

	Analysis			Sample	Sample KQ2007740-03			
Analyte Name	Method	MRL	MDL	Result	Result	Average	RPD	RPD Limit
Arsenic	6010C	21	5	13 J	ND U	NC	NC	20
Cobalt	6010C	2.1	0.7	0.9 J	1.1 J	1.0	20	20
Lithium	6010C	21	6	ND U	ND U	ND	-	20
Molybdenum	6010C	8.4	2.1	10.8	ND U	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 7/20/2020 11:01:01 AM

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE

Sample Matrix: Water

Service Request: K2004415 Date Analyzed: 06/11/20

Lab Control Sample Summary Total Metals

Units:ug/L Basis:NA

Lab Control Sample

KQ2007740-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	2440	2500	98	80-120
Cobalt	6010C	1200	1250	96	80-120
Lithium	6010C	9280	10000	93	80-120
Molybdenum	6010C	1010	1000	101	80-120





Anthony Dalton-Atha Anchor QEA, LLC 6720 SW Macadam Avenue Suite 125 Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020 For your reference, these analyses have been assigned our service request number **K2004416**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

noe D. Oar

ALS Group USA, Corp. dba ALS Environmental

Mark Harris

Project Manager

dba ALS Environmental



Narrative Documents



Client:Anchor QEA, LLCService Request: K2004416Project:APC SSEDate Received: 05/29/2020

Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by

Approved by

Date 06/17/2020



Sample Receipt Information

Chain of Custody Record & Laboratory Analysis Request Parameters ANCHOR OEA 5/29/2020 Date: Jessica Goin Project Name: APC SSE Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave email: adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier No. of Lithium Collection Arsenic Line Field Sample ID Matrix Time Date Comments/Preservation 16 GS-AP-MW-8_F1_016 5/26/2020 10:15 Water х х х nitric acid MR-AP-MW-3D F1 017 17 5/26/2020 10:20 Water x х х nitric acid 18 MR-AP-MW-4_F1_018 5/26/2020 10:25 1 х nitric acid Water Х х 19 MR-AP-MW-5_F1_019 5/26/2020 10:30 Water 1 х х х nitric acid MW-1_F1_020 20 5/26/2020 10:35 Water х x х nitric acid 21 MW-12_F1_021 5/26/2020 10:40 Water х х X nitric acid 22 Blank_F1_022 5/26/2020 10:45 Water 1 nitric acid Х Х Х Х 23 OLD-MW-2D-F1_012_DUP 5/26/2020 10:50 Water 1 х х х nitric acid Notes: Relinguished by: Company: Received by: Company: Suns Anthony Dalton-Atha Anchor QEA Date/Time: Signature/Print Name: Date/Time: Signature/Print Name: 5/29/2020 10:00 Relinquished by: Received by: Company: Company: Signature/Print Name: Date/Time: Signature/Print Name: Date/Time: Distribution: A copy will be made for the laboratory and client. The Project file will retain the original. Page____of___

Chain of Custody Record & Laboratory Analysis Request **Parameters** L ANCHOR OEA Date: 5/29/2020 Project Name: APC SSE Jessica Goin Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave email: adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier Manganese Calcium No. of Collection Lithium Cobalt Field Sample ID Line Matrix Time Date Comments/Preservation BY-AP-MW-11_F2_001 5/27/2020 9:00 Water х х х х х nitric acid BY-AP-MW-12_F2_002 5/27/2020 9:05 Water х X x x nitric acid 3 BY-AP-MW-13_F2_003 5/27/2020 nitric acid 9:10 1 Х х Water Х х 4 BY-AP-MW-2_F2_004 5/27/2020 9:15 Water 1 Х х х х Х nitric acid BY-AP-MW-7_F2_005 5 5/27/2020 9:20 Water х х x х nitric acid 6 BY-AP-MW-9_F2_006 5/27/2020 9:25 Water х х x х nitric acid х 7 GC-AP-MW-1_F2_007 5/27/2020 9:30 Water Х nitric acid X Х Х х Х 8 GC-AP-MW-11_F2_008 5/27/2020 9:35 Water х Х X х х х nitric acid 9 GC-AP-MW-16_F2_009 5/27/2020 1 х х nitric acid 9:40 Water х х х х OLD-MW-115_F2_010 5/27/2020 9:45 Water х Х х х Х nitric acid 11 OLD-MW-11_F2_011 5/27/2020 9:50 Water 1 Х X X x nitric acid х Х 12 OLD-MW-2D_F2_012 5/27/2020 9:55 Water 1 х х X х nitric acid X х 13 GC-AP-MW-17_F2_013 5/27/2020 10:00 nitric acid Water Х х х Х GN-AP-MW-5, F2, 014 5/27/2020 10:05 Water х х х х х nitric acid х 15 GS-AP-MW-6D_F2_015 5/27/2020 10:10 Water X х Х nitric acid Notes:

Relinquished by:	Company:	Received by:	Company:
Anthony Dalton-Atha	Anchor QEA	J Su	IN ALS
Signature/Print Name:	Date/Time:	Signature/Print Name:	Date/Time:,
	5/29/2020 10:00	A	5/29/20 1145
Relinquished by:	Company:	Received by:	Company:
Signature/Print Name:	Date/Time:	Signature/Print Name:	Date/Time:

Chain of Custody Record & Laboratory Analysis Request **Parameters** ANCHOR OEA Date: 5/29/2020 Jessica Goin Project Name: APC SSE Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave email: adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Shipment Method: Courier Manganese No. of Lithium Collection Arsenic Cobalt Field Sample ID Line Matrix Date Time Comments/Preservation GS-AP-MW-8_F2_016 5/27/2020 1 х х х nitric acid 16 10:15 Water Х х MR-AP-MW-3D_F2_017 nitric acid 5/27/2020 х 10:20 Water х х х nitric acid 18 MR-AP-MW-4_F2_018 5/27/2020 10:25 Water Х Х х Х х х 19 MR-AP-MW-5_F2_019 5/27/2020 1 nitric acid 10:30 Water х Х х x X 20 nitric acid MW-1_F2_020 5/27/2020 10:35 Water 1 Х х Х Х X Х nitric acid MW-12_F2_021 5/27/2020 10:40 Water х Х х х Х 22 Blank_F2_022 5/27/2020 10:45 Water х nitric acid 1 X х х Χ Х nitric acid OLD-MW-2D-F2_012_DUP 5/27/2020 10:50 Water 1 Х х X X X Notes: Relinguished by: Received by: Company: Company: SWOLF Anthony Dalton-Atha Anchor QEA Date/Time: Signature/Print Name: Signature/Print Name: Date/Time: 5/29/2020 10:00 Relinquished by: Company: Received by: Company: Signature/Print Name: Date/Time: Signature/Print Name: Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page____of___



	sample ID 2" Samp		Bottle Count Bottle Type - 125mL, eac	Out of Temp		Broke	pH X	Reagent HNO2	Volume added O. 5m.L	Reagent Lot Number REL-54-C	initials	Time 1100 G/fz
	ample ID 2" Samp		Bottle Type	Temp		Broke	pH X	1670	added	Number	initials 6	
	ample ID		Bottle Type	Temp		Broke	рĦ	Reagent	added	Number	Initials	
Sai												
Sai												
	mple ID on Bo	ttle		Samp	le ID or	n COC				identified by:		
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	nple labels ar ropriate bottl		•			_		•	n the table oi	n page 2. N. N.		
Were all sa	ample labels		ole, tissue san e analysis, pr	•			Fro	en Partid	illy Thawed	Thawed N) N
	iples received	l in good co	ndition (temp	erature, u	nbrok	-				N.		
	naterial: Instody papers p					icks (Wet I	Dry Ice	Sleeves	N.) N
	10.7	12.0	10.6	9.6		202						
lemp Blank	Sample 1	Sample 2	Sample 3	Samnia 4		R GUN	G	poler / COC 10	NA	Tracking Numi	nor NA	Filed
If present,	were custody	y seals intac	t?	0	N		If pre	sent, were the	ey signed and	d dated?	(Ý	N
-	ody seals on	, ,	NA	1	N		-	*******	where?/	Front	NA	
	vere received vere received		SPS Fed Cooler		UPS	DH Envel		PDX Co Other	ourier Ho	and Delivered	B 7.4	
•	129/202	Ope	ned: <u>5/29</u>	1202 c	<u> </u>	3y: <u>∠</u>	6	Unlo	aded: <u>5/2</u>	416 29/2020 By	: <u>CG</u>	NHA CONTRACTOR OF THE CONTRACT
Samples v			,	/			Servi	ce Request	Λ20 <u>00</u>	-116		



Miscellaneous Forms

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- F. The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- \boldsymbol{Q} $\;\;$ See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection

LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.



Sample Results



Metals

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004416 **Date Collected:** 05/26/20 10:40 **Project:** APC SSE

Date Received: 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: MW-12_F1_021 Basis: NA

Lab Code: K2004416-001

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/11/20 15:09	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/11/20 15:09	06/09/20	
Molybdenum	6010C	52.0	ug/L	8.4	2.1	1	06/11/20 15:09	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004416 **Date Collected:** 05/27/20 10:10 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: GS-AP-MW-6D_F2_015 Basis: NA

Lab Code: K2004416-018

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	9 J	ug/L	21	5	1	06/15/20 12:33	06/09/20	
Calcium	6010C	1140	ug/L	21	3	1	06/15/20 12:33	06/09/20	
Iron	6010C	430	ug/L	42	8	1	06/15/20 12:33	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/15/20 12:33	06/09/20	
Manganese	6010C	31.8	ug/L	1.1	0.2	1	06/15/20 12:33	06/09/20	
Molybdenum	6010C	13.1	ug/L	8.4	2.1	1	06/15/20 12:33	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004416 **Date Collected:** 05/27/20 10:15 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: GS-AP-MW-8_F2_016 Basis: NA

Lab Code: K2004416-019

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	86	ug/L	21	5	1	06/15/20 12:36	06/09/20	
Calcium	6010C	265	ug/L	21	3	1	06/15/20 12:36	06/09/20	
Iron	6010C	1160	ug/L	42	8	1	06/15/20 12:36	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/15/20 12:36	06/09/20	
Manganese	6010C	41.4	ug/L	1.1	0.2	1	06/15/20 12:36	06/09/20	
Molybdenum	6010C	7.2 J	ug/L	8.4	2.1	1	06/15/20 12:36	06/09/20	



QC Summary Forms



Metals

Analytical Report

Client: Anchor QEA, LLC

Project:APC SSEDate Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

Lab Code: KQ2007741-02

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/11/20 15:02	06/09/20	
Calcium	6010C	3 J	ug/L	21	3	1	06/11/20 15:02	06/09/20	
Cobalt	6010C	ND U	ug/L	2.1	0.7	1	06/11/20 15:02	06/09/20	
Iron	6010C	ND U	ug/L	21	8	1	06/11/20 15:02	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/11/20 15:02	06/09/20	
Manganese	6010C	0.4 J	ug/L	1.1	0.2	1	06/11/20 15:02	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/11/20 15:02	06/09/20	

Service Request: K2004416

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Service Request:

K2004416

Date Collected:

05/26/20

Date Received: Date Analyzed: 05/29/20 06/11/20

Date Extracted:

06/9/20

Matrix Spike Summary Total Metals

MW-12_F1_021

K2004416-001

Units: ug/L **Basis:** NA

Analysis Method:

6010C

Prep Method:

Sample Name:

Lab Code:

EPA CLP ILM04.0

Matrix Spike KQ2007741-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	916	1000	92	75-125
Calcium	4060	13300	10000	93	75-125
Cobalt	16.9	427	500	82	75-125
Iron	62	975	1000	91	75-125
Lithium	ND U	10000	10000	100	75-125
Manganese	287	774	500	97	75-125
Molybdenum	52.0	999	1000	95	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Project APC SSE

Sample Matrix:

Sample Name:

Lab Code:

Service Request: K2004416

Date Collected: 05/26/20

Date Received: 05/29/20

Date Analyzed: 06/11/20

Replicate Sample Summary Total Metals

MW-12_F1_021

Units: ug/L

K2004416-001

Water

Basis: NA

Duplicate Sample

					Sample			
	Analysis			Sample	KQ2007741-03			
Analyte Name	Method	MRL	MDL	Result	Result	Average	RPD	RPD Limit
Arsenic	6010C	21	5	ND U	ND U	ND	-	20
Calcium	6010C	21	3	4060	4050	4060	<1	20
Cobalt	6010C	2.1	0.7	16.9	17.9	17.4	6	20
Iron	6010C	21	8	62	62	62	<1	20
Lithium	6010C	21	6	ND U	ND U	ND	-	20
Manganese	6010C	1.1	0.2	287	290	289	1	20
Molybdenum	6010C	8.4	2.1	52.0	52.3	52.2	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 7/20/2020 11:15:25 AM

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Lab Control Sample Summary Total Metals

> Units:ug/L Basis:NA

Service Request: K2004416

Date Analyzed: 06/11/20

Lab Control Sample

KQ2007741-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	2790	2500	111	80-120
Calcium	6010C	12600	12500	101	80-120
Cobalt	6010C	1230	1250	98	80-120
Iron	6010C	2490	2500	99	80-120
Lithium	6010C	9750	10000	98	80-120
Manganese	6010C	1250	1250	100	80-120
Molybdenum	6010C	1040	1000	104	80-120





Anthony Dalton-Atha Anchor QEA, LLC 6720 SW Macadam Avenue Suite 125 Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020 For your reference, these analyses have been assigned our service request number **K2004418**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

noe D. Oar

ALS Group USA, Corp. dba ALS Environmental

Mark Harris

Project Manager

dba ALS Environmental



Narrative Documents



Client:Anchor QEA, LLCService Request: K2004418Project:APC SSEDate Received: 05/29/2020

Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

Method 6010C, 06/19/2020: Samples in this delivery group required dilution to non-target matrix components. Attempts to analyze the undiluted samples resulted in failed instrument QC check samples. The detection limits were elevated accordingly. No further corrective action was appropriate.

Approved by

Approved by

Date 06/22/2020



Sample Receipt Information

Chain of Custody Record & Laboratory Analysis Request Parameters V ANCHOR OEA ₩ Date: 5/29/2020 Project Name: APC SSE Jessica Goin Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave email: adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier Manganese Calcium No. of Lithium Collection Arsenic Cobalt Field Sample ID Matrix Line Date Time Comments/Preservation 16 GS-AP-MW-8_F2_016 5/27/2020 Water х х х х nitric acid 10:15 MR-AP-MW-3D_F2_017 17 5/27/2020 10:20 Water х х Х х х х nitric acid 18 MR-AP-MW-4_F2_018 5/27/2020 10:25 nitric acid Water х х Х Х Х х MR-AP-MW-5_F2_019 nitric acid 5/27/2020 10:30 Water х х х х x х 20 MW-1_F2_020 5/27/2020 10:35 Water х х х х x х nitric acid 21 MW-12_F2_021 5/27/2020 10:40 Water x X X Х х nitric acid Х Blank_F2_022 5/27/2020 10:45 nitric acid Water х х Х х х х 23 OLD-MW-2D-F2_012_DUP 5/27/2020 10:50 Water х х Х Х х х nitric acid Notes: Received by: Company: Relinquished by: Company: SWOLF Anthony Dalton-Atha Anchor OEA Date/Time: Signature/Print Name: Date/Time: Signature/Print Name: 5/29/2020 10:00 Relinquished by: Company: Received by: Company: Signature/Print Name: Date/Time: Signature/Print Name: Date/Time:

Chain of Custody Record & Laboratory Analysis Request **Parameters** 5/29/2020 Date: Project Name: APC SSE Jessica Goin Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave email: adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier Manganese Aluminum Collection No. of Arsenic Lithium Cobalt Line Field Sample ID Matrix Date Time Comments/Preservation BY-AP-MW-11_F3_001 Water nitric acid Х Х 2 BY-AP-MW-12_F3_002 Water Х Х х X nitric acid Х 3 BY-AP-MW-13_F3_003 Water 1 nitric acid х х х X Х 4 BY-AP-MW-2_F3_004 1 nitric acid Water X х Х Х Х 5 BY-AP-MW-7_F3_005 Water х nitric acid x х х х 6 BY-AP-MW-9_F3_006 1 nitric acid Water Х х Х Х Х GC-AP-MW-1_F3_007 1 Water Х Х х х Х Х nitric acid 8 GC-AP-MW-11_F3_008 nitric acid Water 1 Х Х Х Х Х X 9 GC-AP-MW-16_F3_009 Water 1 Х Х х х Х nitric acid 10 OLD-MW-11S_F3_010 Water 1 х Х X nitric acid Х Х Х 11 OLD-MW-11_F3_011 Water 1 х х х х х Х nitric acid 12 OLD-MW-2D_F3_012 Water 1 х х х X х Х nitric acid 13 GC-AP-MW-17_F3_013 Water х nitric acid Х Х Х GN-AP-MW-5_F3_014 nitric acid Water Х Х Х х Х Х 15 GS-AP-MW-6D_F3_015 Water Х Х Х nitric acid Notes: Relinquished by: Received by: Company: Company: Thors Anthony Dalton-Atha Anchor QEA Signature/Print Name: Date/Time: Signature/Print Name: Date/Time: 5/29/2020 10:00 Relinquished by: Received by: Company: Company: Signature/Print Name: Date/Time: Signature/Print Name: Date/Time:



Cooler Receipt and Preservation Form

Client A	SCHOR	QEA	,		-		Serv	ice Req	uest <i>K</i>	20044	118		
Received: <u>5</u>	129/202	Ope	ned: <u>5/29</u>	12020	<u> </u>	By: <u>∠</u>	6	1	Unload	led: <u>5/2</u>	29/2020 By	r. CG	
2. Samples v	vere received vere received ody seals on	l in: (circle)	SPS Fed Cooler NA	Bo	<i>UPS</i> x N	DH Envel	оре	PDX (Otl	her		and Delivered Fron +	. NA	
	were custod				N	_		,	-	signed an		Ŷ	N
Temp Blank	Sample 1	Sample 2	Sample 3			IR GUN		ooler / C	OC 10 (NA NA	Tracking Num	ber (NA	Filed
	10.7	12.0	10.6	9.6	14	R02	•						
								· · · · · · · · · · · · · · · · · · ·	·				
6. Were sam 7. Were all sa 8. Did all san 9. Were appl 10. Were the 11. Were VO 12. Was C12	ples received ample labels aple labels ar ropriate bottl pH-preserve	If applicate the complete (i.e., and tags agreed es/container and bottles (see ived without e?	d out (ink, sign dition (tempole, tissue same analysis, prewith custody as and volume e SMO GEN State theadspace?	erature, unples wer eservation y papers? es receive OP) recei	inbrok e recei n, etc.) Indic d for the	ived: ?? cate maj the tests the app table be	Frontior distinction	zen l screpane ated?	Partiall _.	y Thawed the table of	N	A CY A CY A CY A Y	N C
			Bottle Count	Out of		Danks	рH	Pas	igent	Volume added	Reagent Lot Number	initials	Time
All "F	ample ID 2" <i>Sam</i> p	les 1-	Bottle Type -125mL, eac		space	DIOKE	X	HN	70	0.5ml	RE1-54-C	6	1100 G/g/
Notes, Discr	epancies, &	2 Resolution	ns: Temp	okay		mete	1/3	anal	yse	5			



Miscellaneous Forms

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- F. The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- \boldsymbol{Q} $\;\;$ See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection

LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.



Sample Results



Metals

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004418 **Date Collected:** 05/27/20 10:50 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: OLD-MW-2D-F2_012_DUP Basis: NA

Lab Code: K2004418-006

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	30 J	ug/L	110	30	5	06/19/20 12:17	06/09/20	
Calcium	6010C	25600	ug/L	110	20	5	06/19/20 12:17	06/09/20	
Iron	6010C	440	ug/L	210	40	5	06/19/20 12:17	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:17	06/09/20	
Manganese	6010C	667	ug/L	5.3	1.1	5	06/19/20 12:17	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 12:17	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004418 **Date Collected:** 05/28/20 09:45 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: OLD-MW-11S_F3_010 Basis: NA

Lab Code: K2004418-016

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Aluminum	6010C	600	ug/L	110	30	5	06/19/20 12:50	06/09/20	
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 12:50	06/09/20	
Iron	6010C	3720	ug/L	210	40	5	06/19/20 12:50	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:50	06/09/20	
Manganese	6010C	607	ug/L	5.3	1.1	5	06/19/20 12:50	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 12:50	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004418 **Date Collected:** 05/28/20 09:50 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: OLD-MW-11_F3_011 Basis: NA

Lab Code: K2004418-017

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Aluminum	6010C	770	ug/L	110	30	5	06/19/20 12:53	06/09/20	
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 12:53	06/09/20	
Iron	6010C	2280	ug/L	210	40	5	06/19/20 12:53	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:53	06/09/20	
Manganese	6010C	961	ug/L	5.3	1.1	5	06/19/20 12:53	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 12:53	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004418 **Date Collected:** 05/28/20 09:55 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: OLD-MW-2D_F3_012 Basis: NA

Lab Code: K2004418-018

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Aluminum	6010C	50 J	ug/L	110	30	5	06/19/20 12:55	06/09/20	
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 12:55	06/09/20	
Iron	6010C	2370	ug/L	210	40	5	06/19/20 12:55	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:55	06/09/20	
Manganese	6010C	410	ug/L	5.3	1.1	5	06/19/20 12:55	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 12:55	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004418 **Date Collected:** 05/28/20 10:05 **Project:** APC SSE

Date Received: 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: GN-AP-MW-5_F3_014 Basis: NA

Lab Code: K2004418-020

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Aluminum	6010C	180	ug/L	110	30	5	06/19/20 13:00	06/09/20	
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 13:00	06/09/20	
Iron	6010C	1040	ug/L	210	40	5	06/19/20 13:00	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 13:00	06/09/20	
Manganese	6010C	102	ug/L	5.3	1.1	5	06/19/20 13:00	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 13:00	06/09/20	



QC Summary Forms



Metals

Analytical Report

Client: Anchor QEA, LLC

Project:APC SSEDate Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

Lab Code: KQ2007742-02

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Aluminum	6010C	ND U	ug/L	21	5	1	06/19/20 11:09	06/09/20	
Arsenic	6010C	ND U	ug/L	21	5	1	06/19/20 11:09	06/09/20	
Calcium	6010C	8 J	ug/L	21	3	1	06/19/20 11:09	06/09/20	
Cobalt	6010C	ND U	ug/L	2.1	0.7	1	06/19/20 11:09	06/09/20	
Iron	6010C	ND U	ug/L	21	8	1	06/19/20 11:09	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/19/20 11:09	06/09/20	
Manganese	6010C	ND U	ug/L	1.1	0.2	1	06/19/20 11:09	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/19/20 11:09	06/09/20	

Service Request: K2004418

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Service Request:

K2004418

Date Collected:

05/27/20

Date Received: Date Analyzed: 05/29/20 06/19/20

Date Extracted:

06/9/20

Matrix Spike Summary Total Metals

MR-AP-MW-4_F2_018

K2004418-001

Units: ug/L Basis: NA

Analysis Method: 60

6010C

Prep Method:

Sample Name:

Lab Code:

EPA CLP ILM04.0

Matrix Spike KQ2007742-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	790	2470	2000	84	75-125
Arsenic	ND U	980	1000	98	75-125
Calcium	9980	19600	10000	97	75-125
Cobalt	14	481	500	93	75-125
Iron	300	1270	1000	97	75-125
Lithium	ND U	10300	10000	103	75-125
Manganese	1960	2350	500	78	75-125
Molybdenum	24 J	1050	1000	102	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Project APC SSE

Sample Matrix:

Lab Code:

Service Request: K2004418

Date Collected: 05/27/20

Date Received: 05/29/20

Date Analyzed: 06/19/20

Replicate Sample Summary Total Metals

Sample Name: MR-AP-MW-4_F2_018

Water

Units: ug/L

K2004418-001

Basis: NA

Duplicate

	Analysis			Sample	Sample KQ2007742-03			
Analyte Name	Method	MRL	MDL	Result	Result	Average	RPD	RPD Limit
Aluminum	6010C	110	30	790	760	780	4	20
Arsenic	6010C	110	30	ND U	ND U	ND	-	20
Calcium	6010C	110	20	9980	9390	9690	6	20
Cobalt	6010C	11	4	14	11	13	24 #	20
Iron	6010C	110	40	300	310	310	3	20
Lithium	6010C	110	30	ND U	ND U	ND	-	20
Manganese	6010C	5.3	1.1	1960	1850	1910	6	20
Molybdenum	6010C	42	11	24 J	18 J	21	29 #	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 7/20/2020 11:12:52 AM

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Service Request: K2004418 **Date Analyzed:** 06/19/20

Lab Control Sample Summary Total Metals

Units:ug/L Basis:NA

Lab Control Sample

KQ2007742-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	6010C	5240	5000	105	80-120
Arsenic	6010C	2610	2500	105	80-120
Calcium	6010C	12800	12500	102	80-120
Cobalt	6010C	1210	1250	97	80-120
Iron	6010C	2580	2500	103	80-120
Lithium	6010C	10600	10000	106	80-120
Manganese	6010C	1220	1250	97	80-120
Molybdenum	6010C	1030	1000	103	80-120





Anthony Dalton-Atha Anchor QEA, LLC 6720 SW Macadam Avenue Suite 125 Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020 For your reference, these analyses have been assigned our service request number **K2004418**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

noe D. Oar

ALS Group USA, Corp. dba ALS Environmental

Mark Harris

Project Manager

dba ALS Environmental



Narrative Documents



Client: Anchor QEA, LLC Service Request: K2004418

Project: APC SSE Date Received: 05/29/2020

Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

Method 6010C, 06/19/2020: Samples in this delivery group required dilution to non-target matrix components. Attempts to analyze the undiluted samples resulted in failed instrument QC check samples. The detection limits were elevated accordingly. No further corrective action was appropriate.

Approved by

Approved by

Date 06/22/2020



Sample Receipt Information

Chain of Custody Record & Laboratory Analysis Request Parameters V ANCHOR OEA ₩ Date: 5/29/2020 Project Name: APC SSE Jessica Goin Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave email: adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier Manganese Calcium No. of Lithium Collection Arsenic Cobalt Field Sample ID Matrix Line Date Time Comments/Preservation 16 GS-AP-MW-8_F2_016 5/27/2020 Water х х х х nitric acid 10:15 MR-AP-MW-3D_F2_017 17 5/27/2020 10:20 Water х х Х х х х nitric acid 18 MR-AP-MW-4_F2_018 5/27/2020 10:25 nitric acid Water х х Х х Х х MR-AP-MW-5_F2_019 nitric acid 5/27/2020 10:30 Water х х х х x х 20 MW-1_F2_020 5/27/2020 10:35 Water х х х х x х nitric acid 21 MW-12_F2_021 5/27/2020 10:40 Water x X X Х х nitric acid Х Blank_F2_022 5/27/2020 10:45 nitric acid Water х х Х х х х 23 OLD-MW-2D-F2_012_DUP 5/27/2020 10:50 Water х х Х Х х х nitric acid Notes: Received by: Company: Relinquished by: Company: SWOLF Anthony Dalton-Atha Anchor OEA Date/Time: Signature/Print Name: Date/Time: Signature/Print Name: 5/29/2020 10:00 Relinquished by: Company: Received by: Company: Signature/Print Name: Date/Time: Signature/Print Name: Date/Time:



Cooler Receipt and Preservation Form

Client A	SCHOR	QEA	,		-		Serv	ice Req	uest <i>K</i>	20044	118		
Received: <u>5</u>	129/202	Ope	ned: <u>5/29</u>	12020	<u> </u>	By: <u>∠</u>	6	1	Unload	led: <u>5/2</u>	29/2020 By	r. CG	
2. Samples v	vere received vere received ody seals on	l in: (circle)	SPS Fed Cooler NA	Bo	<i>UPS</i> x N	DH Envel	оре	PDX (Otl	her		and Delivered Fron +	. NA	
	were custod				N	_		,	-	signed an		Ŷ	N
Temp Blank	Sample 1	Sample 2	Sample 3			IR GUN		ooler / C	OC 10 (NA NA	Tracking Num	ber (NA	Filed
	10.7	12.0	10.6	9.6	14	R02	•						
								· · · · · · · · · · · · · · · · · · ·	·				
6. Were sam 7. Were all sa 8. Did all san 9. Were appl 10. Were the 11. Were VO 12. Was C12	ples received ample labels aple labels ar ropriate bottl pH-preserve	If applicate the complete (i.e., and tags agreed es/container and bottles (see ived without er).	d out (ink, sign dition (tempole, tissue same analysis, prewith custody as and volume e SMO GEN State theadspace?	erature, unples wer eservation y papers? es receive OP) recei	inbrok e recei n, etc.) Indic d for the	ived: ?? cate maj the tests the app table be	Frontior distinction	zen l screpane ated?	Partiall _.	y Thawed the table of	N	A CY A CY A CY A Y	N C
			Bottle Count	Out of		Danks	рH	Pas	igent	Volume added	Reagent Lot Number	initials	Time
All "F	ample ID 2" <i>Sam</i> p	les 1-	Bottle Type -125mL, eac		space	DIOKE	X	HN	70	0.5ml	RE1-54-C	6	1100 G/g/
Notes, Discr	epancies, &	2 Resolution	ns: Temp	okay		mete	1/3	anal	yse	5			



Miscellaneous Forms

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- F. The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- \boldsymbol{Q} $\;\;$ See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection

LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.



Sample Results



Metals

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004418 **Date Collected:** 05/27/20 10:35 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: MW-1_F2_020 Basis: NA

Lab Code: K2004418-003

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 12:10	06/09/20	
Calcium	6010C	590	ug/L	110	20	5	06/19/20 12:10	06/09/20	
Iron	6010C	940	ug/L	210	40	5	06/19/20 12:10	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:10	06/09/20	
Manganese	6010C	663	ug/L	5.3	1.1	5	06/19/20 12:10	06/09/20	
Molybdenum	6010C	18 J	ug/L	42	11	5	06/19/20 12:10	06/09/20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004418 **Date Collected:** 05/27/20 10:40 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: MW-12_F2_021 Basis: NA

Lab Code: K2004418-004

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	70 J	ug/L	110	30	5	06/19/20 12:12	06/09/20	
Calcium	6010C	500	ug/L	110	20	5	06/19/20 12:12	06/09/20	
Iron	6010C	1850	ug/L	210	40	5	06/19/20 12:12	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:12	06/09/20	
Manganese	6010C	174	ug/L	5.3	1.1	5	06/19/20 12:12	06/09/20	
Molybdenum	6010C	70	ug/L	42	11	5	06/19/20 12:12	06/09/20	



QC Summary Forms



Metals

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC

Project:APC SSEDate Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

Lab Code: KQ2007742-02

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Aluminum	6010C	ND U	ug/L	21	5	1	06/19/20 11:09	06/09/20	
Arsenic	6010C	ND U	ug/L	21	5	1	06/19/20 11:09	06/09/20	
Calcium	6010C	8 J	ug/L	21	3	1	06/19/20 11:09	06/09/20	
Cobalt	6010C	ND U	ug/L	2.1	0.7	1	06/19/20 11:09	06/09/20	
Iron	6010C	ND U	ug/L	21	8	1	06/19/20 11:09	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/19/20 11:09	06/09/20	
Manganese	6010C	ND U	ug/L	1.1	0.2	1	06/19/20 11:09	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/19/20 11:09	06/09/20	

Service Request: K2004418

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Service Request:

K2004418

Date Collected:

05/27/20

Date Received: Date Analyzed: 05/29/20 06/19/20

Date Extracted:

06/9/20

Matrix Spike Summary Total Metals

MR-AP-MW-4_F2_018

K2004418-001

Units: ug/L Basis: NA

Analysis Method: 60

6010C

Prep Method:

Sample Name:

Lab Code:

EPA CLP ILM04.0

Matrix Spike KQ2007742-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	790	2470	2000	84	75-125
Arsenic	ND U	980	1000	98	75-125
Calcium	9980	19600	10000	97	75-125
Cobalt	14	481	500	93	75-125
Iron	300	1270	1000	97	75-125
Lithium	ND U	10300	10000	103	75-125
Manganese	1960	2350	500	78	75-125
Molybdenum	24 J	1050	1000	102	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Project APC SSE

Sample Matrix:

Lab Code:

Service Request: K2004418

Date Collected: 05/27/20

Date Received: 05/29/20

Date Analyzed: 06/19/20

Replicate Sample Summary Total Metals

Sample Name: MR-AP-MW-4_F2_018

Water

Units: ug/L

K2004418-001

Basis: NA

Duplicate

	Analysis			Sample	Sample KQ2007742-03			
Analyte Name	Method	MRL	MDL	Result	Result	Average	RPD	RPD Limit
Aluminum	6010C	110	30	790	760	780	4	20
Arsenic	6010C	110	30	ND U	ND U	ND	-	20
Calcium	6010C	110	20	9980	9390	9690	6	20
Cobalt	6010C	11	4	14	11	13	24 #	20
Iron	6010C	110	40	300	310	310	3	20
Lithium	6010C	110	30	ND U	ND U	ND	-	20
Manganese	6010C	5.3	1.1	1960	1850	1910	6	20
Molybdenum	6010C	42	11	24 J	18 J	21	29 #	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 7/20/2020 11:12:52 AM

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Service Request: K2004418 **Date Analyzed:** 06/19/20

Lab Control Sample Summary Total Metals

Units:ug/L Basis:NA

Lab Control Sample

KQ2007742-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	6010C	5240	5000	105	80-120
Arsenic	6010C	2610	2500	105	80-120
Calcium	6010C	12800	12500	102	80-120
Cobalt	6010C	1210	1250	97	80-120
Iron	6010C	2580	2500	103	80-120
Lithium	6010C	10600	10000	106	80-120
Manganese	6010C	1220	1250	97	80-120
Molybdenum	6010C	1030	1000	103	80-120





Anthony Dalton-Atha Anchor QEA, LLC 6720 SW Macadam Avenue Suite 125 Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020 For your reference, these analyses have been assigned our service request number **K2004421**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

noe D. Oar

ALS Group USA, Corp. dba ALS Environmental

Mark Harris

Project Manager

dba ALS Environmental



Narrative Documents



Client: Anchor QEA, LLC Service Request: K2004421

Project: APC SSE Date Received: 05/29/2020

Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Four water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

Method 6010C, 06/19/2020: Samples in this delivery group required dilution to non-target matrix components. Attempts to analyze the undiluted samples resulted in failed instrument QC check samples. The detection limits were elevated accordingly. No further corrective action was appropriate.

Approved by

Approved by

Date 06/22/2020



Sample Receipt Information

Chain of Custody Record & Laboratory Analysis Request Parameters Date: 5/29/2020 Jessica Goin Project Name: APC SSE Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave adalton-atha@anchorgea.com Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier No. of Lithium Collection Arsenic Cobalt Field Sample ID Line Matrix ē Date Time Comments/Preservation BY-AP-MW-11_F4_001 nitric acid Water х Х 2 BY-AP-MW-12_F4_002 х nitric acid Water Х х 3 BY-AP-MW-13_F4_003 Х х nitric acid Water Х BY-AP-MW-2_F4_004 nitric acid 4 Water 1 х х Х 5 BY-AP-MW-7 F4 005 nitric acid Water Х х х 6 BY-AP-MW-9_F4_006 nitric acid Water 1 х х Х 7 GC-AP-MW-1_F4_007 Water 1 х Х х Х nitric acid 8 GC-AP-MW-11_F4_008 nitric acid Water Х Х х Х 9 GC-AP-MW-16 F4 009 Water х х X nitric acid 10 OLD-MW-115_F4_010 nitric acid Water х Х х Х 11 OLD-MW-11 F4 011 Water 1 х х х Х nitric acid 12 OLD-MW-2D_F4_012 Water 1 X Х Х Х nitric acid GC-AP-MW-17_F4_013 Water nitric acid х Х 14 GN-AP-MW-5 F4 014 nitric acid Water Х Х х х GS-AP-MW-6D_F4_015 Water х х х nitric acid Notes: CAUTION! F4 samples are concentrated (16N) nitric acid. Relinquished by: Received by: Company: Company: Anthony Dalton-Atha Anchor OEA Signature/Print Name: Date/Time: Signature/Print Name: Date/Time: 5/29/2020 10:00 Relinquished by: Received by: Company: Company: Signature/Print Name: Date/Time: Signature/Print Name: Date/Time:

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	Date:		5/29/2020																			Z AN OE	٨٣	
	Project Name:	APC SSE																		1		Jessica Goin		
	Project Manager:	Anthony Dalton-A	tha			1														ı		6720 SW Mac	adam Ave	
	email:	adalton-atha@	anchorgea.	com		2																Suite 125		
	Phone Number:	541-760-0851				ië													ļ			Portland OR 9	7219	
Sh	ipment Method:	Courier				Containers				ᇣ									1					
			Collect	ion	I	ō	·돋	Ę	j.	rbde										ł				
Line	Field S	ample ID	Date	Time	Matrix	ĝ	Arsenic	Lithium	Cobalt	Molybdenum	<u>0</u>										l	Comments/	Preservation	
16	GS-AP-MW-8_F4_	_016			Water	1	x	х		x	Х											nitric acid		
17	MR-AP-MW-3D_F	4_017			Water	1	х	х	х		х											nitric acid		
18	MR-AP-MW-4_F4	_018			Water	1	х	х	х		х			***************************************								nitric acid		
19	MR-AP-MW-5_F4	_019			Water	1	х	х	х		X											nitric acid		
20	MW-1_F4_020				Water	1	х	х		х	х											nitric acid		
21	MW-12_F4_021				Water	1	х	х		х	x											nitric acid		
22	Blank_F4_022				Water	1	Х	х	х	х	X											nitric acid		
23	OLD-MW-2D-F4_	012_DUP			Water	1	x	х		х	х											nitric acid		
Notes:	CAUTIONI F4 samp	les are concentrated	(16N) nitric acid	l								·····	····			***************************************	····	***************************************					***************************************	
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		ny Dalton-Atha				incho	QEA						<u> </u>			متعيم المفاقعين المعاديد		25/	NO	20		15		
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Relinq	uished by:			Compan	y:							Recei	ved by	/:				***************************************			Co	mpany:		**********
Signati	ure/Print Name:			Date/Tin	ne:							Signa	ture/P	rint N	ame:						Da	te/Time:		
	**																							
				Distributio	on: A copy wil	l be ma	de for ti	he labor	atory ar	nd client	. The P	roject fil	le will re	tain the	e origina	rl,						Da	na of	

Chain of Custody Record & Laboratory Analysis Request



Cooler Receipt and Preservation Form

Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered Samples were received in: (circle) Cooler Bax Envelope Other NA Were custody seals on coolers? NA N If yes, how many and where? / Front If present, were custody seals intact? N If present, were they signed and dated? N Temp Blank Sample 1 Sample 2 Sample 3 Sample 4 IR GUN Cooler / COC ID NA Tracking Number NA Filed I O T 1 2 O 10 O 9 O DRO DRO DRO NA Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves Were custody papers properly filled out (ink, signed, etc.)? NA N NA N Were samples received in good condition (temperature, unbroken)? Indicate in the table below. NA N NA	Client A	VCHOR (QEA		ici ice	cipt a					004	421		
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Temp Blank Sample 1 Sample 2 Sample 3 Sample 4 IR GUN Gooler / COC 10 NA Tracking Number (NA) Filed 10.7 17.0 10.6 9.6 JR.02 NA N	 Samples v Samples v 	vere received vere received	via? <i>US</i> in: (circle)	SPS Fed Cooler	Ex l	UPS x	DH Envel	IL ope	Oti	her			NA	
1. Packing material: Inserts Eagets Bubble Wrap Gel Packs Wet let Dry Ice Sleeves 5. Were custody papers properly filled out (ink, signed, etc.)? 6. Were samples received in good condition (temperature, unbroken)? Indicate in the table below. 17. If applicable, tissue samples were received: Frozen Partially Thawed Thawed 7. Were all sample labels complete (i.e analysis, preservation, etc.)? 8. Did all sample labels and tags agree with custody papers? Indicate major discrepancies in the table on page 2. NA NA NA 9. Were appropriate bottles/containers and volumes received for the tests indicated? 10. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below 11. Were VOA vials received without headspace? Indicate in the table below. 12. Was C12/Res negative? 13. Sample ID on Bottle 14. Sample ID on Bottle 15. Sample ID on Bottle 16. Sample ID on COC 16. Identified by: 17. Intitate Time 17. Intitate Time 18. All "F2" Samples II - 125mL, each II on COC 18. All III Intitate Time 18. All "F2" Samples II - 125mL, each III Intitate II	If present,	were custod	y seals intac	t?	00	N		If pre	sent, w	ere they s	igned and	d dated?	(Y	N
Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet lever Dry Ice Sleeves	Temp Blank		······································						ooler / C	COC ID (N	ia)	Tracking Numi	per (NA	Filed
Were custody papers properly filled out (ink, signed, etc.)? NA N	Control	10.	16.0	10-6	7.0			-						
Were custody papers properly filled out (ink, signed, etc.)? NA N														
Sample ID Bottle Type Temp space Broke pH Reagent added Number Initials Time A (I "F2" Samples I-125mL, each X HNO3 0.5mL RE1-54-C C IIOO Glybc	5. Were cust 6. Were sam 7. Were all sa 8. Did all sam 9. Were app 10. Were the 11. Were VC 12. Was C12	ody papers p ples received ample labels uple labels an ropriate bottl pH-preserve A vials receive	oroperly filled in good configuration of the complete (i.e., and tags agreed es/container and bottles (see ived without e?	ed out (ink, signature) and (tempole, tissue sande analysis, property with custoders and volume are SMO GEN S	gned, etc. perature, unples wereservation by papers? es receive by recei lindicate)? anbroke e recei n, etc.) Indic d for the ved at in the	en)? Inved: ived: ive	ndicat From	e in the zen crepanated?	table bei Partially cies in th	low. Thawed e table or	N. Thawed N. n page 2. N. ble below N.		и () и () и ()
		!/	oles 1:	Bottle Type	Temp		Broke	рН	Re	70	added	Number	Initials	
Notes, Discrepancies, & Resolutions: Temp okay - metals analyses														
Notes, Discrepancies, & Resolutions: Temp okay - metals analyses														
	Notes, Discr	epancies, &	Resolutio	ons: Temp	pokay		neta	2(3	anai	yses				



Miscellaneous Forms

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- F. The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- \boldsymbol{Q} $\;\;$ See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection

LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.



Sample Results



Metals

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004421 **Date Collected:** 05/28/20 10:10 **Project:** APC SSE **Sample Matrix:** Water

Date Received: 05/29/20 11:45

Sample Name: GS-AP-MW-6D_F4_015 Basis: NA

Lab Code: K2004421-004

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 16:58	06/09/20	
Iron	6010C	3530	ug/L	110	40	5	06/19/20 11:37	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 11:37	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 16:58	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004421 **Date Collected:** 05/28/20 10:15 **Project:** APC SSE **Date Received:** 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: GS-AP-MW-8_F4_016 Basis: NA

Lab Code: K2004421-005

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	380	ug/L	210	50	10	06/19/20 17:12	06/09/20	
Iron	6010C	2180000	ug/L	420	80	10	06/19/20 17:12	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 11:41	06/09/20	
Molybdenum	6010C	ND U	ug/L	84	21	10	06/19/20 17:12	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Service Request: K2004421 **Date Collected:** 05/28/20 10:35 **Project:** APC SSE **Sample Matrix:** Water

Date Received: 05/29/20 11:45

Sample Name: MW-1_F4_020 Basis: NA

Lab Code: K2004421-009

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 17:26	06/09/20	
Iron	6010C	37100	ug/L	110	40	5	06/19/20 12:38	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:38	06/09/20	
Molybdenum	6010C	55	ug/L	42	11	5	06/19/20 17:26	06/09/20	

Analytical Report

Anchor QEA, LLC **Client:**

Lab Code:

Service Request: K2004421 **Date Collected:** 05/28/20 10:40 **Project:** APC SSE

Date Received: 05/29/20 11:45 **Sample Matrix:** Water

Sample Name: MW-12_F4_021 Basis: NA

K2004421-010

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	\mathbf{MDL}	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	300	ug/L	110	30	5	06/19/20 17:30	06/09/20	
Iron	6010C	135000	ug/L	110	40	5	06/19/20 12:41	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:41	06/09/20	
Molybdenum	6010C	144	ug/L	42	11	5	06/19/20 17:30	06/09/20	



QC Summary Forms



Metals

Analytical Report

Client: Anchor QEA, LLC

Project:APC SSEDate Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

Lab Code: KQ2007746-02

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	ug/L	21	5	1	06/19/20 16:24	06/09/20	
Cobalt	6010C	ND U	ug/L	2.1	0.7	1	06/19/20 16:24	06/09/20	
Iron	6010C	ND U	ug/L	42	8	1	06/19/20 16:24	06/09/20	
Lithium	6010C	ND U	ug/L	21	6	1	06/19/20 16:24	06/09/20	
Molybdenum	6010C	ND U	ug/L	8.4	2.1	1	06/19/20 16:24	06/09/20	

Service Request: K2004421

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE **Sample Matrix:** Water

Service Request: Date Collected:

K2004421

Date Conecteu:

05/28/20

Date Received:

05/29/20

Date Analyzed: Date Extracted: 06/19/20 06/9/20

Matrix Spike Summary Total Metals

OLD-MW-2D_F4_012

K2004421-001

Analysis Method: 6010C

Prep Method:

Sample Name:

Lab Code:

EPA CLP ILM04.0

Units: Basis: ug/L NA

Matrix Spike

KQ2007746-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	960	1000	96	75-125
Cobalt	74	513	500	88	75-125
Iron	1050000	1020000	1000	-2168 #	75-125
Lithium	ND U	9900	10000	99	75-125
Molybdenum	ND U	952	1000	95	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Printed 7/20/2020 11:05:55 AM

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC

Water

Project APC SSE

Sample Matrix:

Sample Name:

Analyte Name

Arsenic

Cobalt

Lithium

Molybdenum

Iron

Lab Code:

 QEA, LLC
 Service Request:
 K2004421

 E
 Date Collected:
 05/28/20

Date Received: 05/29/20

Date Analyzed: 06/19/20

Replicate Sample Summary Total Metals

Sample

Result ND U

74

1050000

ND U

ND U

OLD-MW-2D_F4_012

MRL

210

11

110

110

84

MDL

50

4

40

30

21

Units: ug/L

Basis: NA

20

20

K2004421-001

Analysis

Method

6010C

6010C

6010C

6010C

6010C

Duplicate

ND U

ND U

Sample KQ2007746-03 Result	Average	RPD	RPD Limit
ND U	ND	-	20
76	75	3	20
1050000	1050000	<1	20

ND

ND

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 7/20/2020 11:05:55 AM

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE

Sample Matrix: Water

Service Request: K2004421 Date Analyzed: 06/19/20

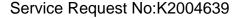
Lab Control Sample Summary Total Metals

Units:ug/L Basis:NA

Lab Control Sample

KQ2007746-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	2540	2500	102	80-120
Cobalt	6010C	1190	1250	95	80-120
Iron	6010C	2340	2500	93	80-120
Lithium	6010C	9940	10000	99	80-120
Molybdenum	6010C	1010	1000	101	80-120





Anthony Dalton-Atha Anchor QEA, LLC 6720 SW Macadam Avenue Suite 125 Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory June 04, 2020 For your reference, these analyses have been assigned our service request number **K2004639**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

noe D. Oar

ALS Group USA, Corp. dba ALS Environmental

Mark Harris

Project Manager

dba ALS Environmental



Narrative Documents



Client:Anchor QEA, LLCService Request: K2004639Project:APC SSEDate Received: 06/04/2020

Sample Matrix: Soil

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty three soil samples were received for analysis at ALS Environmental on 06/04/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by Moe D. Dan

Date 07/21/2020



Sample Receipt Information

4 2004634

Chain of Custody Record & Laboratory Analysis Request Parameters Date: 5/29/2020 Project Name: APC SSE Jessica Goin 6720 SW Macadam Ave Project Manager: Anthony Dalton-Atha email: adalton-atha@anchorgea.com No. of Containers Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier Arsenic Lithium Collection Cobalt Field Sample ID Matrix Line Time Date Comments/Preservation BY-AP-MW-11_F5_001 SED BY-AP-MW-12_F5_002 2 SED 3 BY-AP-MW-13_F5_003 SED 4 BY-AP-MW-2_F5_004 SED 5 BY-AP-MW-7_F5_005 SED 6 BY-AP-MW-9_F5_006 SED 7 GC-AP-MW-1_F5_007 SED 1 8 GC-AP-MW-11_F5_008 SED 9 GC-AP-MW-16_F5_009 SED OLD-MW-11S_F5_010 SED 10 1 11 OLD-MW-11_F5_011 SED OLD-MW-2D_F5_012 12 SED 1 13 GC-AP-MW-17_F5_013 SED GN-AP-MW-5_F5_014 SED 1 15 GS-AP-MW-6D_F5_015 SED nitric acid Notes: Relinquished by: Company: Received by: Company: 4/20 142 Anchor QEA Anthony Dalton-Atha 6/4/2020 PAN Signature/Print Name: Date/Time: Signature/Print Name: Date/Time: -5/29/2020**(**0:00) Relinquished by: Received by: Company: Company: Signature/Print Name: Signature/Print Name: Date/Time: Date/Time:

K2004639

Chain of Custody Record & Laboratory Analysis Request ANCHOR OEA **Parameters** Date: 5/29/2020 Project Name: APC SSE Jessica Goin Project Manager: Anthony Dalton-Atha 6720 SW Macadam Ave No. of Containers email: adalton-atha@anchorgea.com Suite 125 Phone Number: 541-760-0851 Portland OR 97219 Molybdenum Shipment Method: Courier Lithium Collection Cobalt Field Sample ID Matrix Line Date Time Comments/Preservation 16 GS-AP-MW-8_F5_016 SED MR-AP-MW-3D_F5_017 17 SED 1 MR-AP-MW-4_F5_018 SED 1 19 MR-AP-MW-5_F5_019 SED 1 20 MW-1_F5_020 SED 1 MW-12_F5_021 SED 21 1 Blank_F5_022 SED 1 OLD-MW-2D-F5_012_DUP SED Notes: Received by: Company: Relinquished by: Company: Anchor QEA Anthony Dalton-Atha 19/2020/M Signature/Print Name: Date/Time: Signature/Print Name: Date/Time: *572972020 10:00 Received by: Company: Relinquished by: Company: Signature/Print Name: Date/Time: Signature/Print Name: Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page____of____



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Miscellaneous Forms

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- F. The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- \boldsymbol{Q} $\;\;$ See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection

LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.



Sample Results



Metals

Analytical Report

Client: Anchor QEA, LLC

Project: APC SSE

Sample Matrix: Soil

Service Request: K2004639

Date Collected: NA

Date Received: 06/04/20 14:20

Basis: As Received

Sample Name:

GS-AP-MW-6D_F5_015

Lab Code:

K2004639-015

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	mg/Kg	8.3	2.1	2	06/18/20 16:45	06/15/20	
Cobalt	6010C	0.23 J	mg/Kg	0.83	0.10	2	06/18/20 16:45	06/15/20	
Lithium	6010C	ND U	mg/Kg	4.1	0.6	2	06/18/20 16:45	06/15/20	
Molybdenum	6010C	ND U	mg/Kg	0.83	0.21	2	06/18/20 16:45	06/15/20	

Analytical Report

Client: Anchor QEA, LLC

Project: APC SSE

Sample Matrix: Soil Date Received: 06/04/20 14:20

Sample Name: GS-AP-MW-8_F5_016 Basis: As Received

Lab Code: K2004639-016

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	mg/Kg	16	4	2	06/18/20 16:55	06/15/20	
Cobalt	6010C	0.9 J	mg/Kg	1.6	0.2	2	06/18/20 16:55	06/15/20	
Lithium	6010C	ND U	mg/Kg	8.0	1.2	2	06/18/20 16:55	06/15/20	
Molybdenum	6010C	8.1	mg/Kg	1.6	0.4	2	06/18/20 16:55	06/15/20	

Service Request: K2004639 **Date Collected:** NA

Analytical Report

Client: Anchor QEA, LLC

Project: APC SSE

Sample Matrix: Soil

Date Collected: NA

Service Request: K2004639

Date Received: 06/04/20 14:20

Sample Name: MW-1_F5_020 Basis: As Received

Lab Code: K2004639-020

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	2.9 J	mg/Kg	8.8	2.2	2	06/18/20 17:05	06/15/20	
Cobalt	6010C	1.63	mg/Kg	0.88	0.11	2	06/18/20 17:05	06/15/20	
Lithium	6010C	3.7 J	mg/Kg	4.4	0.7	2	06/18/20 17:05	06/15/20	
Molybdenum	6010C	6.51	mg/Kg	0.88	0.22	2	06/18/20 17:05	06/15/20	

Analytical Report

Anchor QEA, LLC **Client:**

Project: APC SSE

Sample Matrix: Soil Date Collected: NA

Service Request: K2004639

Date Received: 06/04/20 14:20

MW-12_F5_021

Basis: As Received

Sample Name: Lab Code: K2004639-021

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	14.5	mg/Kg	8.2	2.0	2	06/18/20 17:15	06/15/20	
Cobalt	6010C	9.24	mg/Kg	0.82	0.10	2	06/18/20 17:15	06/15/20	
Lithium	6010C	7.1	mg/Kg	4.1	0.6	2	06/18/20 17:15	06/15/20	
Molybdenum	6010C	50.8	mg/Kg	0.82	0.20	2	06/18/20 17:15	06/15/20	



QC Summary Forms



Metals

Analytical Report

Client: Anchor QEA, LLC

Project:APC SSEDate Collected:NASample Matrix:SoilDate Received:NA

Sample Name: Method Blank Basis: As Received

Lab Code: KQ2007817-01

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	mg/Kg	8.0	2.0	2	06/18/20 15:50	06/15/20	
Cobalt	6010C	ND U	mg/Kg	0.80	0.10	2	06/18/20 15:50	06/15/20	
Lithium	6010C	ND U	mg/Kg	4.0	0.6	2	06/18/20 15:50	06/15/20	
Molybdenum	6010C	ND U	mg/Kg	0.80	0.20	2	06/18/20 15:50	06/15/20	

Service Request: K2004639

Analytical Report

Client: Anchor QEA, LLC

Project:APC SSEDate Collected:NASample Matrix:SoilDate Received:NA

Sample Name: Method Blank Basis: As Received

Lab Code: KQ2007818-01

Total Metals

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Arsenic	6010C	ND U	mg/Kg	8.0	2.0	2	06/18/20 17:08	06/15/20	
Cobalt	6010C	ND U	mg/Kg	0.80	0.10	2	06/18/20 17:08	06/15/20	
Lithium	6010C	ND U	mg/Kg	4.0	0.6	2	06/18/20 17:08	06/15/20	
Molybdenum	6010C	ND U	mg/Kg	0.80	0.20	2	06/18/20 17:08	06/15/20	

Service Request: K2004639

QA/QC Report

Client: Anchor QEA, LLC

Project: APC SSE

Sample Matrix: Soil

Service Request: K2004639 Date Analyzed: 06/18/20

Lab Control Sample Summary Total Metals

Units:mg/Kg
Basis:As Received

Lab Control Sample

KQ2007817-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	97.3	100	97	80-120
Cobalt	6010C	96.0	100	96	80-120
Lithium	6010C	490	500	98	80-120
Molybdenum	6010C	101	100	101	80-120

QA/QC Report

Client: Anchor QEA, LLC

Service Request: K2004639 **Project:** APC SSE **Date Analyzed:** 06/18/20

Sample Matrix: Soil

Lab Control Sample Summary Total Metals

Units:mg/Kg Basis: As Received

Lab Control Sample

KQ2007818-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	94.5	100	95	80-120
Cobalt	6010C	93.6	100	94	80-120
Lithium	6010C	477	500	95	80-120
Molybdenum	6010C	98.1	100	98	80-120