

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

**ALABAMA POWER COMPANY  
PLANT GASTON  
GYPSUM POND**

**January 31, 2020**

Prepared for

Alabama Power Company  
Birmingham, Alabama

By

Southern Company Services  
Earth Science and Environmental Engineering



## CERTIFICATION STATEMENT

This *Annual Groundwater Monitoring and Corrective Action Report, Alabama Power Company - Plant Gaston 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.

 1/27/2020

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## **EXECUTIVE SUMMARY**

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

- The CCR unit began the monitoring period in Assessment Monitoring pursuant to §257.95 and ADEM Admin. Code r. 335-13-15-.06(6). Statistically significant increases (SSIs) of Appendix III constituents over background were identified in the results of the first detection monitoring event and Assessment Monitoring was initiated in January 2018.
- Statistically significant levels (SSLs) of Appendix IV parameters have not been identified during the 2019 semiannual monitoring events and in accordance with § 257.95(d) and ADEM Admin. Code r. 335-13-15-.06(6)(d), APC will continue assessment monitoring.

The CCR Unit concluded the monitoring period in Assessment Monitoring. The following next steps will be taken for the CCR Unit:

- Continue semi-annual assessment monitoring in February or March 2020 and submit first semi-annual groundwater monitoring report of 2020 to the Department by July 31, 2020.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	i
1.0      Introduction.....	1
2.0      Site Location and Description.....	2
2.1      Site Geology and Hydrogeology.....	2
2.1.1      Physical Setting.....	2
2.1.2      Geology and Hydrogeology .....	2
2.1.3      Uppermost Aquifer .....	4
2.1.4      Flow Interpretation.....	4
2.2      Groundwater Monitoring System.....	5
2.2.1      Monitoring Wells .....	5
2.2.1.1      Upgradient Wells .....	5
2.2.1.2      Downgradient Wells .....	5
2.2.1.3      Piezometers .....	6
2.2.1.4      Monitoring Variance .....	6
2.2.2      Groundwater Monitoring History .....	6
2.2.2.1      Available Monitoring Data .....	6
2.2.2.2      Historical Groundwater Flow.....	7
2.2.3      Groundwater Sampling and Analysis.....	7
2.2.3.1      Sampling Event Summary .....	7
2.2.3.2      Groundwater Sample Collection.....	8
2.2.3.3      Sample Preservation and Handling .....	8
2.2.3.4      Chain of Custody .....	9
2.2.3.5      Laboratory Analysis .....	9
3.0      Groundwater Data Evaluation.....	10

Plant Gaston Gypsum Pond  
2019 Annual Groundwater Monitoring and Corrective Action Report

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3.1	Groundwater Elevation Data Evaluation .....	10
3.2	Groundwater Flow Velocity Calculations.....	10
4.0	Evaluation of Groundwater Quality Data .....	12
4.1	Data Validation – Quality Assurance/Quality Control .....	12
4.2	Statistical Methodology and Tests .....	13
4.2.1	Appendix III Evaluation.....	13
4.2.2	Appendix IV Evaluation .....	14
4.3	Statistical Exceedances .....	15
4.3.1	Appendix III Constituents.....	15
4.3.2	Appendix IV Constituents.....	15
5.0	Monitoring Program Status.....	17
6.0	Summary and Conclusions .....	18
7.0	References.....	19

## **FIGURES**

- Figure 1 Site Location Map
- Figure 2 Site Topographic Map
- Figure 3 Site Geologic Map
- Figure 4a Geologic Cross-Section A-A'
- Figure 4b Geologic Cross-Section B-B'
- Figure 5 Monitoring Well Location Map
- Figure 6 Potentiometric Surface Contour Map (May 20, 2019)
- Figure 7 Potentiometric Surface Contour Map (September 3, 2019)

## **TABLES**

- Table 1 Groundwater Monitoring Well Network Details
- Table 2 Monitoring Parameters and Reporting Limits
- Table 3 Groundwater Elevation Summary
- Table 4 Groundwater Flow Velocity Calculations
- Table 5 Relative Percent Difference Calculations
- Table 6 Summary of Background Levels and Groundwater Protection Standards
- Table 7 First Semi-Annual Monitoring Event Analytical Summary
- Table 8 Second Semi-Annual Monitoring Event Analytical Summary

## **APPENDICES**

- Appendix A Groundwater Analytical Data
- Appendix B Laboratory and Field Records
- Appendix C Statistical Analysis

## ABBREVIATIONS

ADEM	Alabama Department of Environmental Management
AL	Alabama
APC	Alabama Power Company
APCEL	APC Environmental Laboratory
ASD	Alternate Source Demonstration
ASTM	American Society for Testing and Materials
BGS	below ground surface
CCR	Coal Combustion Residual
CFR	Code of Federal Regulations
COC	chain of custody
DO	dissolved oxygen
EPA	United States Environmental Protection Agency
ft	feet
GW	groundwater
GWPS	Groundwater Protection Standard(s)
LCL	Lower Confidence Limit
m	meter
mg/L	milligram per liter
MSL	mean sea level
MW-	denotes “Monitoring Well”
NELAP	National Environmental Laboratory Accreditation Program
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
pCi/L	picocuries per liter
PE	Professional Engineer
PG	Professional Geologist
PL	prediction limits
PQL	practical quantitation limit
PVC	polymerizing vinyl chloride
QA/QC	quality assurance/quality control
RL	reporting limit
RPD	relative percent difference
SM	Standard Method(s)
SSI	statistically significant increase
SSL	statistically significant level
TAL	Test America, Inc.
TOC	top of casing
TDS	total dissolved solids
USGS	Unites States Geological Survey
UTLs	Upper Tolerance Limits

## **1.0 INTRODUCTION**

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

APC's Plant E. C. Gaston Steam Plant (Plant Gaston) is in Shelby County, Alabama. The physical address is 31972 Alabama Highway 25, Wilsonville, AL 35186. Plant Gaston lies in Section 1, Township 21 South, Range 1 East, Sections 5 and 6, Township 21 South, Range 2 East, and Sections 31 and 32, Township 20 South, Range 2 East data are based on visual inspection of USGS topographic quadrangle maps and GIS maps (USGS, 1980, 1982a, 1982b, 1983). The Gypsum Pond is located north-northeast of the main plant along the Coosa 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 topography is characterized by a flat valley adjacent to the Coosa River in the eastern portion of the plant between uplands in the southeastern and northwestern portions. Elevations typically range from 400 to 600 feet above mean sea level (msl) in the Coosa Valley district of the Valley and Ridge physiographic province. The Coosa Valley extends approximately 100 miles from southwest to northeast, with a width averaging approximately 20 miles (Sapp and Emplaincourt, 1975). Local topography is characterized by moderate topographic relief with elevations ranging from approximately 395 msl along the eastern plant boundary along the bank of the Coosa River to approximately 530 feet msl at a hilltop in the southwestern portion of the plant.

The topography of the Plant Gaston Gypsum Pond area can generally be described as flat or gently sloping, with land surface dipping from around 420 ft msl to 400 ft msl, from north to south, respectively. At the site, the land surface dips towards Yellowleaf Creek to the south and drainage features east and west of the Gypsum Pond. **Figure 2, Site Topographic Map**, provides the topography of the site.

### 2.1.2 Geology and Hydrogeology

Plant Gaston is located in the Coosa Valley district of the Valley and Ridge Physiographic Province of central Alabama. The geologic units on the property have been folded and faulted at various intervals, and several faults consisting of low-to-high angle thrust faults and some normal faults are present. Fault sets trend obliquely to one another in the northeastern portion of the plant, resulting in a series of imbricate thrust slices of Fort Payne chert, Parkwood and Floyd shales, and Newala limestone (Frings, 1980).

The plant is on a portion of the Valley and Ridge province known as the Coosa deformed belt, which is a long, sinuous, structurally complex zone that can be subdivided laterally into three segments by two lateral offsets. (GSA, 2010b) The Coosa deformed belt is situated on the Yellowleaf thrust sheet, which is a shallowly detached structural complex with small-scale, commonly isoclinal parasitic folding (McIntyre, *et al.*, 2010). Two lateral offsets subdivide the belt, the Harpersville offset and the Reeds Mill offset. The Harpersville offset is located on the southwest end of the Coosa deformed belt and lies just northeast of the plant. **Figure 3, Site Geologic Map**, illustrates the surface geology at the site and neighboring areas.

The boundaries of the Coosa deformed belt are delineated by the Coosa synclinorium to the north and the Pell City thrust fault to the south. Most structures in the belt trend northeast-southwest, although a northwest-southeast trend is encountered in the plant area. Imbricate thrust slices of sedimentary Paleozoic rocks comprise the geological material of the belt (Frings, 1981). The area is underlain by a structurally complex Paleozoic sequence of sedimentary rocks that range from Cambrian to Mississippian in age. Carbonate rocks comprise the bulk of the Cambrian and Ordovician rocks, and cherty limestone, sandstone, and shale comprise the Mississippian-age units. Also present in some portions of the plant is a thin unit of Devonian-age sandstone or shale.

Generalized near surface stratigraphy of the site, in descending order, consists of approximately 18 to 60 feet of overburden materials overlying the Ordovician Newala Limestone. Overburden materials are predominantly comprised of yellow-brown, clayey sand with zones of clay and gravelly fines. The underlying Newala Limestone was encountered at depths ranging from 18 to 60 feet and was described as a medium to dark gray, micritic limestone with thin shale layers and minor amounts of dolomite. A 12-ft thick section of light gray, sandstone was encountered at location GN-GSA-MW-13, possibly indicating the presence of the Parkwood Formation at portions of the site. Pyrite occurrence was noted at GN-GSA-MW-13 as well. **Figure 4a, Geologic Cross-Section A-A'** and **Figure 4b, Geologic Cross-Section B-B'**, illustrates the geologic layering beneath the site.

Plant Gaston is located in the Valley and Ridge aquifer system. The Valley and Ridge aquifer system, found in the Coosa, Cahaba, Birmingham-Big Canoe, and Murphrees Valleys, includes the Weisner Formation; Shady Dolomite; Conasauga Formation; Copper Ridge and Chepultepec Dolomites; as well as the Longview, Newala, Lenoir, and Little Oak Limestones. In some areas, the Knox Group includes Copper Ridge, Chepultepec, Longview, and Newala united as one group. This aquifer system includes the Ketona, Brierfield, and Bibb Dolomites in Shelby County. Other rock units of Cambrian to Devonian age are

included within the Valley and Ridge aquifer system, due to the fact that they do not form effective barriers to ground water movement among permeable units of the system. However, these other units are not significant sources of ground water (Kopaska-Merkel *et al.*, 2005).

The vadose or unsaturated zone at the time of field investigations was generally between 20 and 30 feet thick beneath the site. The vadose zone was primarily composed of fine sediments formed from the in-situ weathering of the Newala Limestone. Recharge through the vadose zone occurs via infiltration of meteoric water and likely, is transmitted through macropore, funneled, or unstable flow processes.

### **2.1.3 Uppermost Aquifer**

The first zone of saturation or uppermost aquifer beneath the site generally corresponds to more permeable overburden materials and weathered/fractured rock near the transition zone. These intervals would be considered part of a local alluvial aquifer system that may be considered part of the Valley and Ridge Aquifer when no aquiclude or confining layers are present. Groundwater producing overburden materials are described as clayey sands and mixed gravel and clay, indicative of in-situ weathering of rock. Within the Newala Limestone, groundwater can be found in weathered zones near the top of rock or slightly deeper in zones where fractures or bedding structures permit the storage and flow of groundwater. Generally, the first zone of saturation or uppermost aquifer can be found at depths between 30 and 40 feet BGS at the site. Near the northeastern corner of the Plant Gaston Gypsum Pond, groundwater was not present in the overburden materials or at the overburden-rock interface. In this area, first groundwater occurrence is deeper within the Newala Limestone. GN-GSA-MW-1 located to the northeast of facility was drilled to a depth of 168.5 feet BGS and screened across a fractured interval from 113 to 123 ft BGS. Groundwater elevations from GN-GSA-MW-1 are slightly lower than neighboring wells indicating potential for this to be a discrete network of fractures or separate aquifer from other monitoring wells.

### **2.1.4 Flow Interpretation**

Groundwater flow at the site is generally from north to south, south-east, and towards Yellowleaf Creek. Groundwater flow is accomplished via porous or Darcian flow mechanics through coarse overburden materials and accomplished via fractures or other discontinuities within the Newala Limestone. 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 Gaston has installed a groundwater monitoring system to monitor groundwater within the uppermost aquifer. The certified groundwater monitoring system for the Plant Gaston 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**

The groundwater monitoring network is comprised of 14 monitoring wells and 1 piezometer (PZ-4 formerly MW-4). The piezometer is utilized to enhance groundwater potentiometric surfaces and constrain flow direction. Monitoring well locations and piezometers 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 Gaston Gypsum Pond.

#### **2.2.1.1 Upgradient Wells**

Data used to establish background water quality or selection of upgradient wells include (1) review of groundwater elevation data and potentiometric surface contour maps to determine groundwater flow direction and (2) a screening of Appendix III CCR indicator parameters (chiefly calcium, sulfate, and boron for Gypsum) for apparently elevated concentrations.

Monitoring well locations GN-GSA-MW-2, GN-GSA-MW-3, GN-GSA-MW-14S, and GN-GSA-MW-MW-15 serve as upgradient locations for Gypsum Pond. Groundwater generally flows from north to south across the Site.. Upgradient wells are located north of the Gypsum Pond as determined by water level monitoring and potentiometric surface maps constructed for the Site.

#### **2.2.1.2 Downgradient Wells**

Monitoring well locations GN-GSA-MW-1 and GN-GSA-MW-5 through GN-GSA-MW-13 are utilized as downgradient locations for the Gypsum Pond. Downgradient locations are located lateral to and south of

the Gypsum Pond as determined by water level monitoring and potentiometric surface maps constructed for the site.

#### **2.2.1.3 Piezometers**

Location GN-GSA-PZ-4, formerly GN-GSA-MW-4, is utilized as a water-level only piezometer. The location helps constrain Site groundwater flow conditions and potentiometric surface contour maps.

#### **2.2.1.4 Monitoring Variance**

The groundwater monitoring program at the Site is operating under a Variance granted by the Department

on April 15, 2019, to conform State monitoring requirements under the CCR rule to Federal requirements.

The variance:

1. retains boron as an Appendix III detection monitoring parameter and excludes it as an Appendix IV assessment monitoring parameter; and
2. authorizes the use of Federally-published groundwater protection standards (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 March 2016 to July 2017. Semi-annual groundwater monitoring was initiated at the Gypsum Pond in September 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 (8) 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 March 2016 to July 2017. Groundwater sampling for the first detection monitoring event after the background period was performed in September 2017.

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

assessment sampling has continued with sampling events in June and October of 2018 and May and September of 2019.

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 is generally from north to south, south-east, and towards Yellowleaf Creek. Groundwater flow is accomplished via porous or Darcian flow mechanics through coarse overburden materials and accomplished via fractures or other discontinuities within the Newala Limestone.

Groundwater elevations fluctuate in response to rainfall. Seasonal variations of 3 to 8 feet are typical at the site. Greater magnitude fluctuations are observed in upgradient wells to the north which is consistent with recharge areas.

### **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 Site 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 did not identify SSLs of Appendix IV constituents above the GWPS. Therefore, in accordance with § 257.95(d) and Alabama Admin. Code r. 335-13-15-.06(6)(d), the Site remained in Assessment Monitoring.

#### **2.2.3.1 Sampling Event Summary**

Semi-annual Assessment Monitoring sampling events occurred in May 2019 and September 2019. Groundwater samples were analyzed for the full list of Appendix III and Appendix IV parameters during each Assessment Monitoring event. Analytical data from the groundwater monitoring events is included as **Appendix 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 Gaston are equipped with a dedicated pump. Monitoring wells were purged and sampled using low-flow sampling procedures whereby samples are collected when field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen) were measured to determine stabilization. Groundwater samples were collected when the following stabilization criteria were met:

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

During purging and sampling a SmarTroll instrument was used to monitor and record field parameters. Once stabilization was achieved, samples were collected and submitted to the laboratory following standard chain-of-custody (COC) protocol. Field data recorded in support of groundwater sampling activities for the monitoring events are included in **Appendix 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 4°C immediately after collection. Blue ice or other cooling packs were not used for cooling samples. An ice-packed cooler was on hand when samples were collected.

#### **2.2.3.4 Chain of Custody**

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

## 3.0 GROUNDWATER DATA EVALUATION

### 3.1 GROUNDWATER ELEVATION DATA EVALUATION

During the May 2019 sampling event, depths to water ranged from 13.49 to 29.94 feet below top of casing and groundwater elevations ranged from 396.01 to 414.22 feet above mean seal level (ft MSL). During the September 2019 sampling event, depths to water ranged from 16.76 to 33.45 ft BTOC and groundwater elevations ranged from 395.30 to 410.95 ft MSL. **Figure 6, Potentiometric Surface Contour Map (May 20, 2019)** and **Figure 7, Potentiometric Surface Contour Map (September 3, 2019)** depict groundwater elevations and inferred groundwater flow direction from higher elevation to lower. As shown on **Figures 6** and **7** groundwater flows from north to the south-southeast consistent with historic observations. All available groundwater elevation data recorded since 2016 have been tabulated and included in **Table 3, Groundwater Elevations Summary**.

### 3.2 GROUNDWATER FLOW VELOCITY CALCULATIONS

Groundwater flow rates at the site were calculated based on hydraulic gradients, hydraulic conductivity from previous slug test results, and an estimated effective porosity of the screened horizon. Slug testing at well locations GN-GSA-MW-2 and GN-GSA-MW-8 provided horizontal hydraulic conductivities between  $2.321 \times 10^{-5}$  cm/sec and  $2.74 \times 10^{-4}$  cm/sec with an average of  $1.49 \times 10^{-4}$  cm/sec or 0.42 ft/day at the gypsum pond. An estimated effective porosity of 15% is used in the flow rate calculations. The hydraulic gradient was calculated between well pairs shown on **Table 4, Horizontal Groundwater Flow Velocity Calculation**.

Horizontal flow velocity was calculated using the commonly-used derivative of Darcy's Law:

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

Where:

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

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

$$i = \text{Horizontal hydraulic gradient}$$

$n_e$ = Effective porosity

Using this equation, horizontal groundwater flow velocity is calculated for the site and is tabulated on **Table 4**. **Table 4** presents the horizontal flow velocity calculated using groundwater elevation data from the sampling events in 2019.

## 4.0 EVALUATION OF GROUNDWATER QUALITY DATA

### 4.1 DATA VALIDATION – QUALITY ASSURANCE/QUALITY CONTROL

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

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

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the relative percent differences below 20%, the difference is considered acceptable and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 5, Relative Percent Difference Calculations**, provides the relative percent differences for sample and sample duplicates during 2019 sampling events. All RPD's were below 20% for the 2019 sampling events.

## 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 calcium, chloride, sulfate, and TDS to determine whether there has been a statistically significant increase (SSI) over background groundwater quality. Interwell prediction limits, combined with a 1-of-2 verification strategy were constructed for boron, fluoride, and pH. 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 statistically significant increases (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 at all wells for Appendix III parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database.

The following adjustments were made:

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

#### **4.2.2 Appendix IV Evaluation**

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

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

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

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

In Assessment Monitoring, when the Lower Confidence Limit (LCL), or the entire interval, exceeds the GWPS as discussed in the USEPA Unified Guidance (2009), the result is recorded as an SSL.

GWPS for Appendix IV constituents will be updated every two years beginning with the most recent event (Fall 2019). The next update to GWPS will occur no earlier than the Fall of 2021. Data from upgradient wells collected in between updates may still be used to support ASDs if merited.

#### 4.3 STATISTICAL EXCEEDANCES

Analytical data from the 2019 semi-annual monitoring events in May and September were statistically analyzed in accordance with the PE-certified Statistical Analysis Plan (October 2017) and updated in September 2019 data screening evaluation performed by Groundwater Stats Consulting. Appendix III statistical analysis was performed to determine if constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

##### 4.3.1 Appendix III Constituents

A review of the Sanitas results presented in **Appendix C, Statistical Analysis** identified the following Appendix III SSIs during the first semi-annual monitoring event:

- GN-GSA-MW-1: Calcium, TDS
- GN-GSA-MW-5: Sulfate, TDS
- GN-GSA-MW-6: pH, TDS
- GN-GSA-MW-7: Calcium
- GN-GSA-MW-8: Sulfate
- GN-GSA-MW-10: Calcium, TDS
- GN-GSA-MW-11: Chloride
- GN-GSA-MW-12: Calcium
- GN-GSA-MW-13: Calcium

During the second semi-annual monitoring event the following SSIs over background:

- GN-GSA-MW-1: Fluoride
- GN-GSA-MW-6: pH
- GN-GSA-MW-8: Fluoride, Sulfate
- GN-GSA-MW-11: pH

Since the site is performing assessment monitoring, no further action is required regarding these SSIs.

##### 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**. A review of the Sanitas results presented in **Appendix C** 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**, provides a summary of all constituent concentrations for the 2019 semi-annual sampling events.

## **5.0 MONITORING PROGRAM STATUS**

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 were identified at the Plant Gaston Gypsum Pond during sampling events conducted in 2019 and the site remained in assessment monitoring. Since no SSLs of Appendix IV constituents were observed over the GWPS, in accordance with §257.95(d) and ADEM Admin. Code r. 335-13-15-.06(6)(d), APC will continue assessment monitoring and will not implement assessment of corrective measures under § 257.96 and ADEM Admin. Code r. 335-13-15-.06(7).

## **6.0 SUMMARY AND CONCLUSIONS**

Based on results reported in the *2017 Annual Groundwater and Corrective Action Monitoring Report*, APC initiated an assessment monitoring program on January 15, 2018. Groundwater samples were subsequently collected from the certified well network and analyzed for Appendix III and IV parameters.

The certified compliance monitoring well network was resampled on a semi-annual basis. The groundwater samples were analyzed for all Appendix III & IV parameters. Statistical evaluations of the May and September 2019 assessment monitoring data identified no SSLs of Appendix IV constituents above the GWPS. Therefore, in accordance with §257.95(d) and Alabama Admin. Code r. 335-13-15-.06(6)(d), APC will continue assessment monitoring.

The first semi-annual assessment monitoring event is planned for first quarter of 2020 and a groundwater monitoring report summarizing this event will be submitted by July 31, 2020.

## 7.0 REFERENCES

- Alabama Department of Environmental Management (ADEM), 2018, Solid Waste Program, Division 13, ADEM Admin. Code r. 335-13-15
- 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
- Frings, D.M., 1980. Report on the Geology of E.C. Gaston Steam Plant Dry Ash Disposal System. Provided by Southern Company Services, December, 2010.
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- Geological Survey of Alabama (GSA), 2010b, Digital Geologic Map of Alabama, URL:<http://www.gsa.state.al.us/index.html>, accessed November, 2010.
- Kopaska-Merkel, David C., Lewis S. Dean, and James D. Moore, 2005. Hydrogeology and Vulnerability to Contamination of Major Aquifers in Alabama: Area 4. Geological Survey of Alabama Circular 199D.
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- Sapp, C.D., and Emplaincourt, J., 1975, Physiographic regions of Alabama, Special Map 168, Geological Survey of Alabama
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- United States Geological Survey (USGS), 1980b. Wilsonville, Alabama Quadrangle, 7.5 Minute Series Topographic Map.
- United States Geological Survey (USGS), 2005. Alabama Water Science Center, Water use by County in Alabama, Shelby County. URL: <http://ga2.er.usgs.gov/alabama/waterusecounty.cfm?code=117>. Accessed December, 2010.

# Figures



**Legend**

- █ Gypsum Pond Boundary
- █ Property Boundary (Approximate)



0 1,000 2,000 4,000  
Feet

SCALE 1:12000

DATE 12/17/2019

DRAWN BY KWR

CHECKED BY GBD

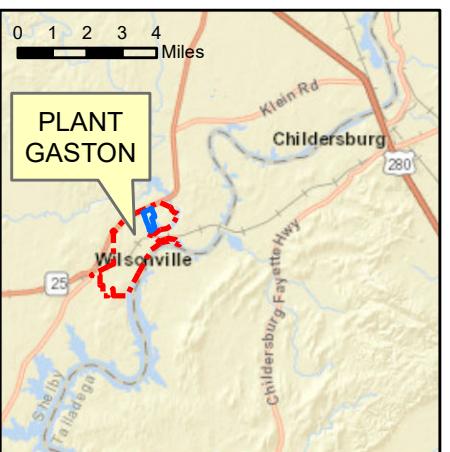
DRAWING TITLE

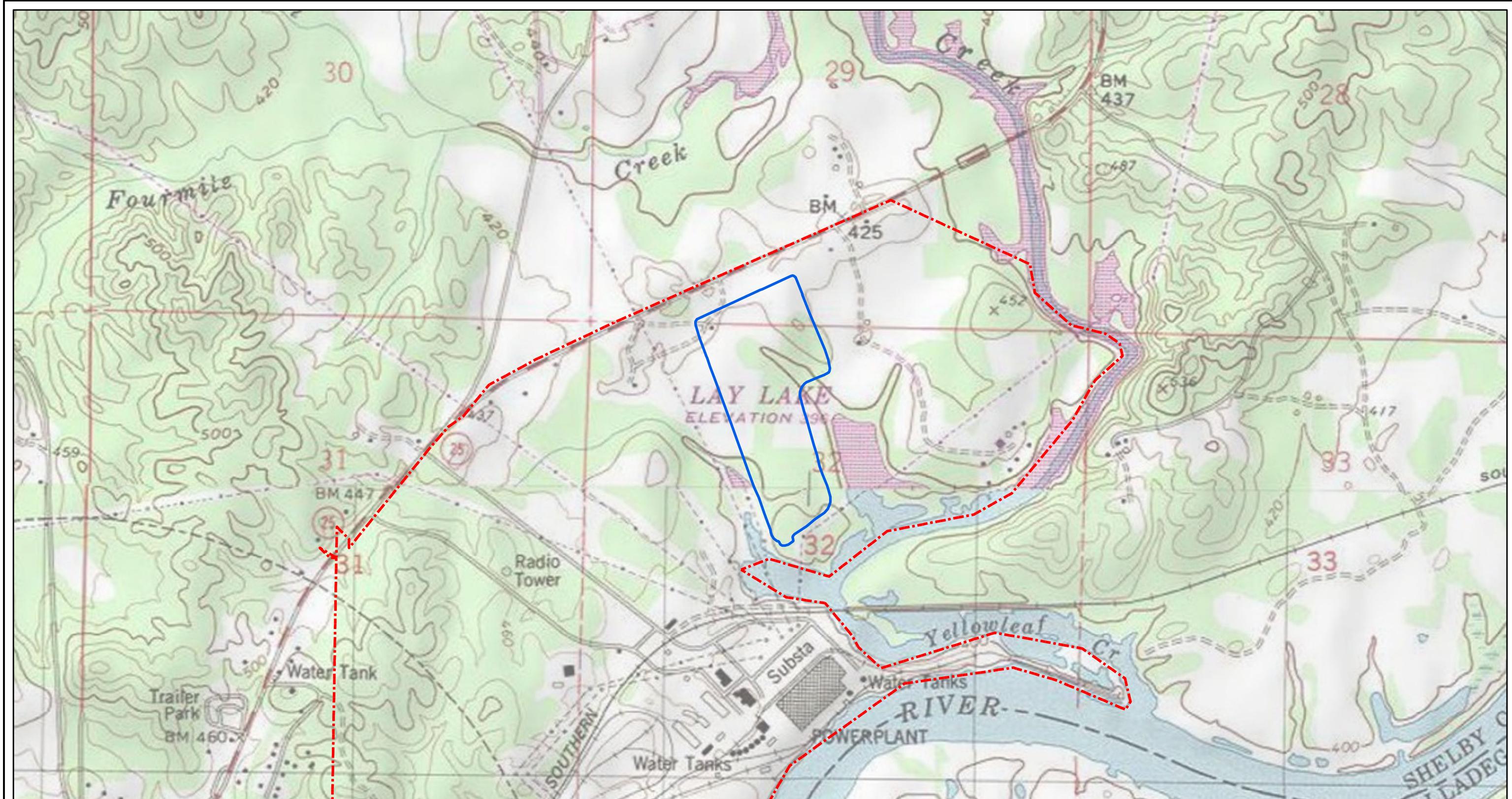
## SITE LOCATION MAP PLANT GASTON GYPSUM POND

FIGURE NO

**FIGURE 1**

Southern Company





## Legend

Gypsum Pond  
Property Boundary (Approximate)



0                  1,000                  2,000                  4,000

SCALE 1:12000

DATE 12/17/20

DRAWN BY KWP

CHECKED BY  
GRD

**DRAWING TITLE**

**SITE TOPOGRAPHIC MAP**  
**PLANT GASTON GYPSUM POND**

FIGURE NO  
**FIGURE 2**




**Legend**

<span style="border: 1px solid blue; padding: 2px;"> </span> Gypsum Storage Area Boundary	Newala Limestone (On)
<span style="border: 2px dashed red; padding: 2px;"> </span> Property Boundary (Approximate)	Parkwood Formation and Floyd Shale undifferentiated (PMpwf)
<span style="background-color: #a0c8f0; border: 1px solid black; padding: 2px;"> </span> Geologic Units	Tuscumbia Limestone and Fort Payne Chert undifferentiated (Mtpf)
<span style="background-color: #a0c8f0; border: 1px solid black; padding: 2px;"> </span> Knox Group undifferentiated (Ock)	



0 1,000 2,000 4,000 Feet

SCALE 1:15000

DATE 12/17/2019

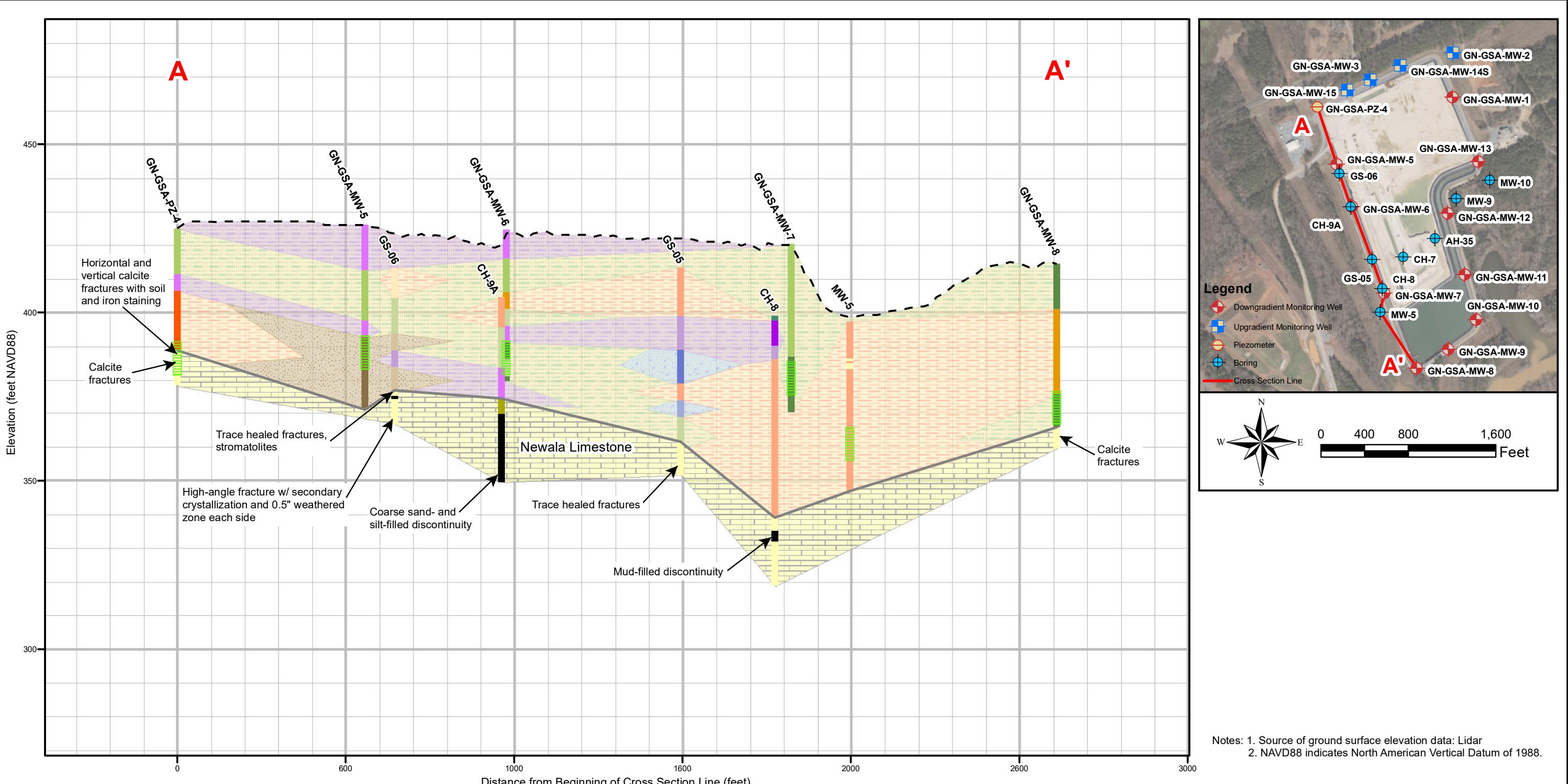
DRAWN BY KWR

CHECKED BY GBD

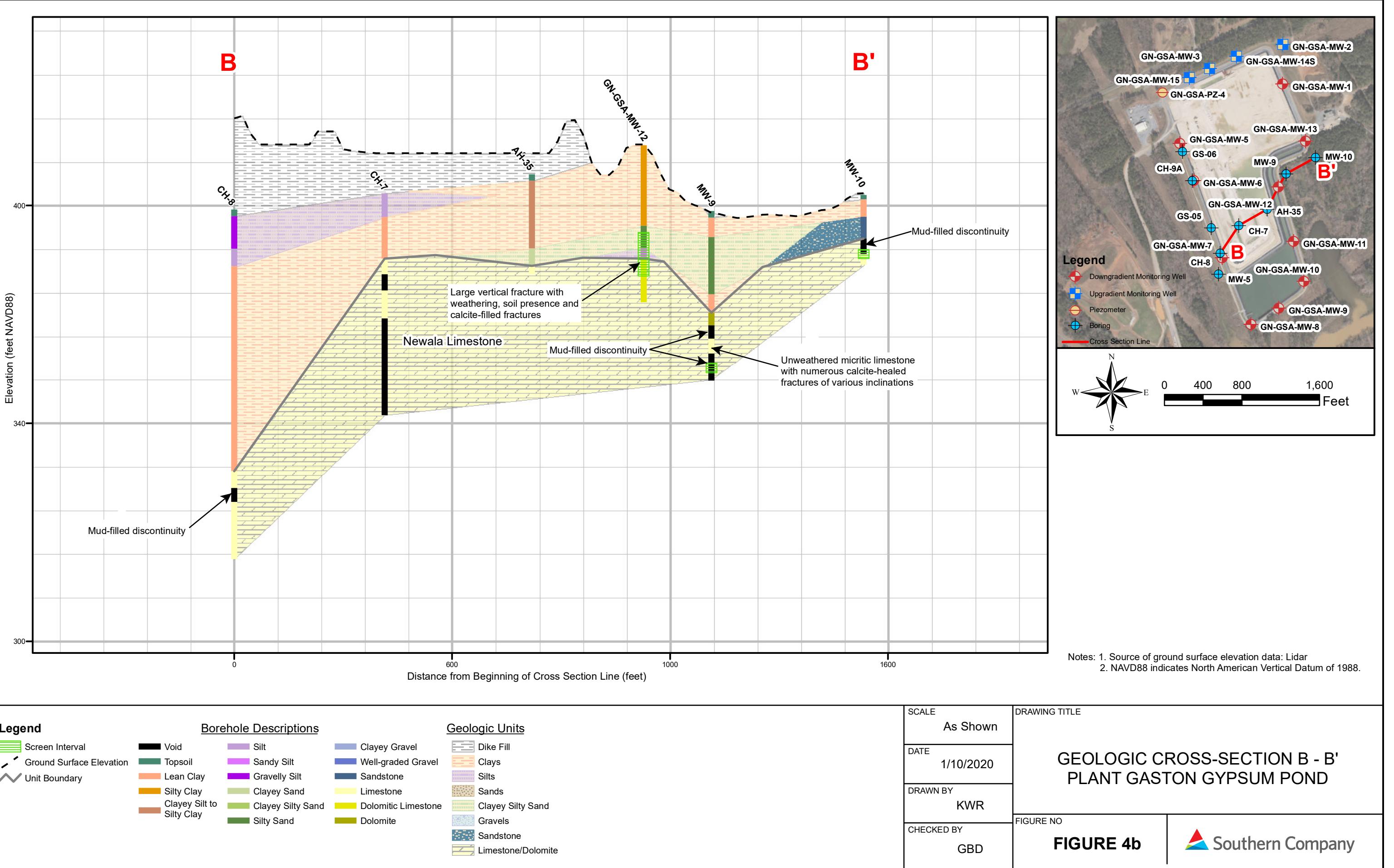
**SITE GEOLOGIC MAP  
PLANT GASTON GYPSUM POND**

FIGURE NO  
**FIGURE 3**

 Southern Company



SCALE	DRAWING TITLE
As Shown	GEOLOGIC CROSS-SECTION A - A' PLANT GASTON GYPSUM POND
DATE	1/10/2020
DRAWN BY	KWR
CHECKED BY	GBD
FIGURE NO	FIGURE 4a
Southern Company	





**Legend**

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Piezometer
- Gypsum Pond Boundary
- Property Boundary (Approximate)



0 500 1,000 2,000 Feet

SCALE 1:6000

DATE 1/9/2020

DRAWN BY KWR

CHECKED BY GBD

DRAWING TITLE  
MONITORING WELL LOCATION MAP  
PLANT GASTON GYPSUM POND

FIGURE NO

**FIGURE 5**

Southern Company



#### Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Piezometer
- GN-GSA-MW-1 Well ID  
398.50 Groundwater Elevation
- Potentiometric Surface Contour
- Approximate Groundwater Flow Direction
- Gypsum Storage Area Boundary



0 1,000 2,000 Feet

SCALE 1:6000

DATE 1/9/2020

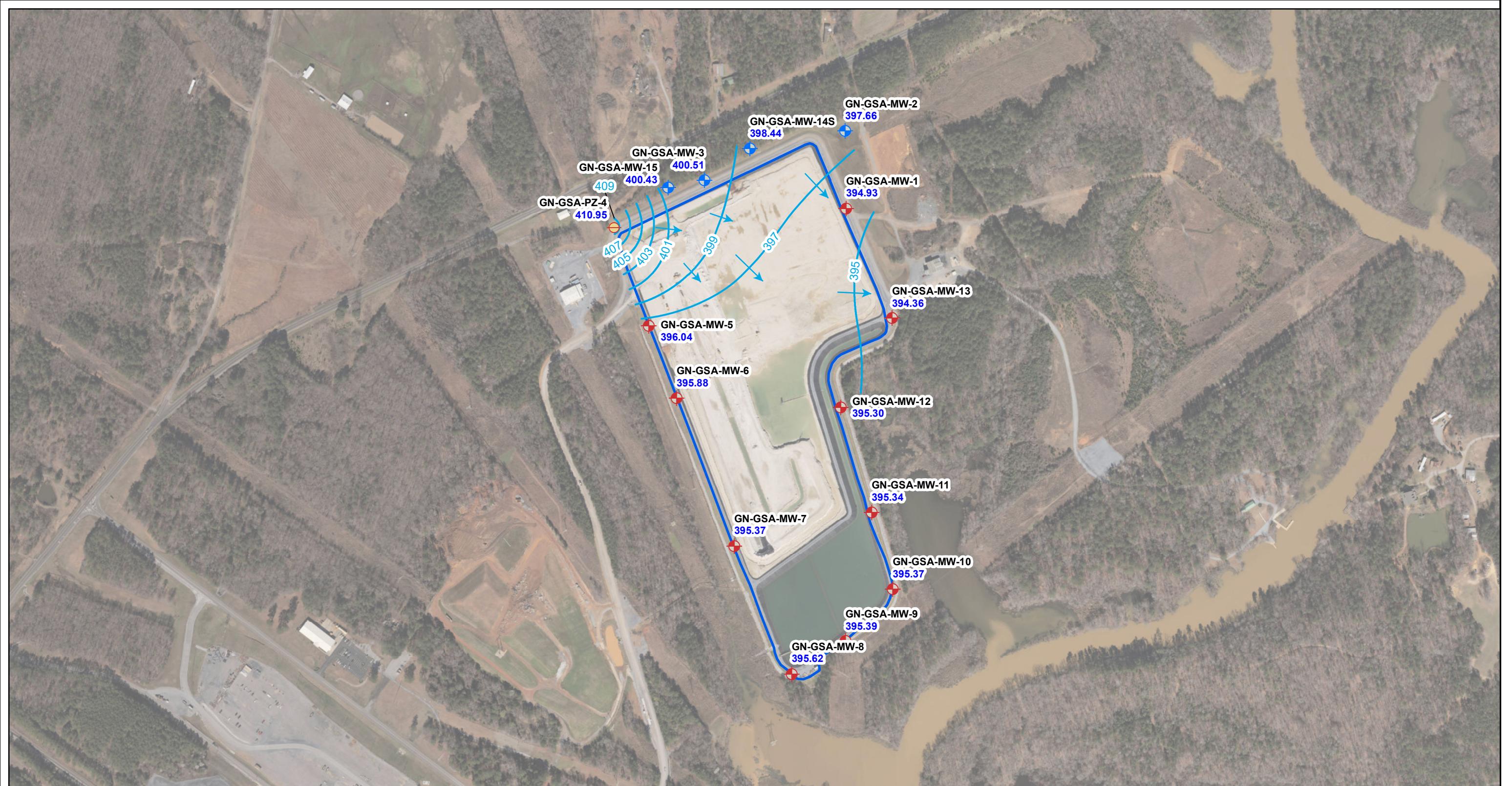
DRAWN BY KWR

CHECKED BY GBD

DRAWING TITLE  
POTENIOMETRIC SURFACE CONTOUR MAP  
MAY 20, 2019  
PLANT GASTON GYPSUM POND

FIGURE NO  
**FIGURE 6**

Southern Company



#### Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Piezometer
- GN-GSA-MW-1 Well ID  
394.93 Groundwater Elevation
- Potentiometric Surface Contour
- Approximate Groundwater Flow Direction
- Gypsum Storage Area Boundary



0 1,000 2,000 Feet

SCALE 1:6000

DATE 1/9/2020

DRAWN BY KWR

CHECKED BY GFB

DRAWING TITLE  
POTENTIOMETRIC SURFACE CONTOUR MAP  
SEPTEMBER 3, 2019  
PLANT GASTON GYPSUM POND

FIGURE NO  
**FIGURE 7**

Southern Company

# Tables

**Table 1.**  
**Groundwater Monitoring Well Network Details**

Well Name	Purpose	Installation Date	Northing	Easting	Ground Elevation	Top of Casing Elevation	Well Depth (ft.) Below Top of Casing	Top of Screen Elevation (ft.) below TOC	Bottom of Screen Elevation (ft.) below TOC	Screen Length (ft.)
GN-GSA-MW-1	Downgradient	11/5/2015	1002932.67	465110.34	423.21	426.73	127.38	309.75	299.75	10
GN-GSA-MW-2	Upgradient	10/28/2015	1003344.33	465112.90	417.63	421.19	58.71	372.88	362.88	10
GN-GSA-MW-3	Upgradient	10/21/2015	1003093.69	464357.74	421.84	425.30	56.64	379.06	369.06	10
GN-GSA-PZ-4	Water-Level only	10/27/2015	1002849.78	463873.54	424.87	427.71	46.50	391.37	381.37	10
GN-GSA-MW-5	Downgradient	11/19/2015	1002321.38	464049.62	426.08	429.49	47.42	392.47	382.47	10
GN-GSA-MW-6	Downgradient	11/17/2015	1001935.61	464191.94	424.55	427.64	47.34	390.70	380.70	10
GN-GSA-MW-7	Downgradient	11/10/2015	1001142.07	464485.43	420.38	423.79	48.97	385.22	375.22	10
GN-GSA-MW-8	Downgradient	10/28/2015	1000455.33	464781.68	414.51	417.58	51.53	376.45	366.45	10
GN-GSA-MW-9	Downgradient	10/29/2015	1000625.59	465070.63	414.76	417.68	46.95	381.13	371.13	10
GN-GSA-MW-10	Downgradient	12/9/2015	1000898.07	465327.37	414.78	418.04	41.91	386.53	376.53	10
GN-GSA-MW-11	Downgradient	11/12/2015	1001309.48	465221.83	414.81	417.69	34.61	393.48	383.48	10
GN-GSA-MW-12	Downgradient	10/29/2015	1001872.32	465065.28	413.80	417.10	33.34	394.16	384.16	10
GN-GSA-MW-13	Downgradient	12/15/2015	1002342.50	465346.71	419.82	422.74	48.56	384.58	374.58	10
GN-GSA-MW-14S	Upgradient	5/3/2016	1003222.16	464632.71	420.32	424.06	45.38	391.08	381.08	10
GN-GSA-MW-15	Upgradient	5/5/2016	1003002.35	464146.68	422.53	426.19	49.97	386.62	376.62	10

Notes:

1. Northing and easting are in feet relative to the State Plant Alabama West North America Datum of 1983
2. Elevations are in feet relative to the North American Vertical Datum of 1988
3. Top of screen and bottom of screen depths are calculated relative Top of Casing elevation and less the well sump length of 0.4

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

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

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

**Table 3.**  
**Groundwater Elevations Summary**

Well Name	Top of Casing Elevation	Groundwater Elevation															
		(ft. AMSL)															
		3/28/2016	4/12/2016	5/16/2016	7/11/2016	9/12/2016	11/14/2016	2/27/2017	5/22/2017	6/19/2017	8/14/2017	1/9/2018	4/16/2018	10/1/2018	5/20/2019	9/3/2019	
GN-GSA-MW-1	426.73	399.89	400.55	399.31	396.15	396.46	394.18	399.83	398.12	400.75	398.09	400.03	398.84	395.23	398.50	394.93	
GN-GSA-MW-2	421.19	403.92	402.87	401.41	398.08	397.71	397.31	401.40	399.44	405.73	399.15	399.14	401.37	397.59	400.52	397.66	
GN-GSA-MW-3	425.30	411.24	409.76	407.57	402.71	400.85	399.16	402.18	403.33	408.43	403.55	402.09	405.13	399.85	405.62	400.51	
GN-GSA-PZ-4	427.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	414.22	410.95
GN-GSA-MW-5	429.49	401.23	401.09	400.13	397.51	397.17	396.30	400.39	399.22	401.99	399.17	400.45	399.53	396.02	399.55	396.04	
GN-GSA-MW-6	427.64	400.10	400.07	399.25	397.27	397.02	395.44	399.55	398.66	400.74	398.55	399.80	398.84	395.94	398.84	395.88	
GN-GSA-MW-7	423.79	391.38	398.01	397.35	395.97	395.77	394.57	397.65	397.24	398.14	397.30	398.17	396.93	394.89	397.16	395.37	
GN-GSA-MW-8	417.58	396.41	397.38	396.20	395.84	395.75	395.46	396.50	395.90	396.71	396.33	397.18	396.07	394.08	396.10	395.62	
GN-GSA-MW-9	417.68	397.03	398.56	396.61	395.76	395.74	394.99	397.13	396.05	398.57	396.75	399.12	396.53	394.25	396.61	395.39	
GN-GSA-MW-10	418.04	396.51	397.33	396.29	395.64	395.68	395.05	396.67	396.21	396.71	396.40	397.39	396.24	394.02	396.26	395.37	
GN-GSA-MW-11	417.69	396.44	397.28	396.21	395.47	395.55	395.13	396.60	396.09	396.38	396.21	397.13	396.09	394.39	396.01	395.34	
GN-GSA-MW-12	417.10	397.82	398.40	397.12	395.67	395.80	394.76	397.69	396.81	397.92	396.92	398.35	396.87	394.95	397.04	395.30	
GN-GSA-MW-13	422.74	399.60	400.87	398.76	395.49	395.93	393.46	399.56	397.83	400.36	397.79	400.73	398.52	394.78	398.11	394.36	
GN-GSA-MW-14S	424.06	--	--	--	400.16	398.80	397.63	401.59	400.86	406.18	400.84	400.00	402.34	398.14	402.39	398.44	
GN-GSA-MW-15	426.19	--	--	--	402.95	401.21	399.07	407.15	404.90	414.83	404.61	406.76	407.66	400.17	406.92	400.43	

Notes:

1. ft. AMSL - feet above mean sea level

2. -- Not Measured

**Table 4.**  
**Horizontal Groundwater Flow Velocity Calculation**

SA01 2019								
Date	GN-GSA-MW-3	GN-GSA-MW-1	Distance	Hydraulic Gradient	Hydraulic Conductivity	Effective Porosity	Calculated Groundwater Flow Velocity (ft/d)	Calculated Groundwater Flow Velocity (ft/yr)
	<b>h<sub>1</sub> (ft)</b>	<b>h<sub>2</sub> (ft)</b>	<b>Δl (ft)</b>	<b>Δh/Δl (ft/ft)</b>	<b>K (ft/d)</b>	<b>n</b>		
5/20/2019	402.39	398.50	770.60	0.00505	0.42000	0.15	0.014000	5.1000

SA02 2019								
Date	GN-GSA-MW-3	GN-GSA-MW-1	Distance	Hydraulic Gradient	Hydraulic Conductivity	Effective Porosity	Calculated Groundwater Flow Velocity (ft/d)	Calculated Groundwater Flow Velocity (ft/yr)
	<b>h<sub>1</sub> (ft)</b>	<b>h<sub>2</sub> (ft)</b>	<b>Δl (ft)</b>	<b>Δh/Δl (ft/ft)</b>	<b>K (ft/d)</b>	<b>n</b>		
9/3/2019	400.51	394.93	770.60	0.00724	0.42000	0.15	0.020275	7.4000

Notes:

ft=feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year

**Table 5.**  
**Relative Percent Difference Calculations**

<b>2019 1st Semi-Annual Monitoring Event</b>				
<b>Parameter</b>	<b>Units</b>	<b>Monitoring Point Identification</b>		<b>Relative Percent Difference (RPD %)</b>
		<b>GN-GSA-MW-6</b>	<b>GN-GSA-MW-6 DUP</b>	
Calcium	mg/L	0.652	0.665	2.0
Chloride	mg/L	3.15	3.16	0.3
TDS	mg/L	27.3	30.7	11.7
Barium	mg/L	0.0156	0.0164	5.0
Antimony	mg/L	0.00171	0.00157	8.5

<b>Parameter</b>	<b>Units</b>	<b>Monitoring Point Identification</b>		<b>Relative Percent Difference (RPD %)</b>
		<b>GN-GSA-MW-10</b>	<b>GN-GSA-MW-10 DUP</b>	
Calcium	mg/L	101	100	1.0
Chloride	mg/L	2.98	2.97	0.3
Sulfate	mg/L	1.72	1.7	1.2
Barium	mg/L	0.0323	0.0336	3.9
TDS	mg/L	274	276	0.7

<b>2019 2nd Semi-Annual Monitoring Event</b>				
<b>Parameter</b>	<b>Units</b>	<b>Monitoring Point Identification</b>		<b>Relative Percent Difference (RPD %)</b>
		<b>GN-GSA-MW-2</b>	<b>GN-GSA-MW-2 DUP</b>	
Calcium	mg/L	89.8	90.4	0.7
Chloride	mg/L	3.56	3.6	1.1
Sulfate	mg/L	9.25	9.21	0.4
TDS	mg/L	297	298	0.3
Barium	mg/L	0.0325	0.0332	2.1

<b>Parameter</b>	<b>Units</b>	<b>Monitoring Point Identification</b>		<b>Relative Percent Difference (RPD %)</b>
		<b>GN-GSA-MW-12</b>	<b>GN-GSA-MW-12 DUP</b>	
Calcium	mg/L	74.2	74.3	0.1
Chloride	mg/L	2.73	2.71	0.7
Fluoride	mg/L	0.0547	0.0569	3.9
Sulfate	mg/L	6.25	6.28	0.5
TDS	mg/L	217	212	2.3
Barium	mg/L	0.0205	0.0216	5.2

**Table 6.**  
**Summary of Background Levels and Groundwater Protection Standards**

Analyte	Units	Background	Federal GWPS	State GWPS
Antimony	mg/L	0.003	0.006	0.006
Arsenic	mg/L	0.005	0.01	0.01
Barium	mg/L	0.0622	2	2
Beryllium	mg/L	0.003	0.004	0.004
Cadmium	mg/L	0.001	0.005	0.005
Chromium	mg/L	0.01	0.1	0.1
Cobalt	mg/L	0.01; 0.005	0.006	0.006
Combined Radium-226/228	pCi/L	1.6; 2.36	5	5
Fluoride	mg/L	0.3, 0.111	4	4
Lead	mg/L	0.005	0.015	0.015
Lithium	mg/L	0.02	0.04	0.04
Mercury	mg/L	0.0005	0.002	0.002
Molybdenum	mg/L	0.01	0.1	0.1
Selenium	mg/L	0.01	0.05	0.05
Thallium	mg/L	0.001	0.002	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and ADEM Rule 335-13-15-.06(h)(4)
4. Where two numbers are present, they denote the different background levels for each of the two semiannual monitoring events in the order that they were determined.

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

		APPENDIX III						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
GN-GSA-MW-1	5/21/2019	0.0376(J)	47.8	2.6	0.264	7.5	4.58	244
GN-GSA-MW-2	5/20/2019	Non-Detect	87.3	3.53	Non-Detect	7.13	7.52	286
GN-GSA-MW-3	5/22/2019	Non-Detect	53.1	2.83	0.0515(J)	6.38	11	184
GN-GSA-MW-5	5/20/2019	0.0769(J)	58.8	12.9	0.0842(J)	6.59	75.6	398
GN-GSA-MW-6	5/20/2019	Non-Detect	0.652	3.15	Non-Detect	4.59	Non-Detect	27.3
GN-GSA-MW-7	5/20/2019	Non-Detect	72.5	3.25	0.0919(J)	6.81	6.85	218
GN-GSA-MW-8	5/21/2019	Non-Detect	55.7	1.51	0.109	7.31	3.39	185
GN-GSA-MW-9	5/21/2019	Non-Detect	51.6	2.12	0.0526(J)	6.79	6.07	176
GN-GSA-MW-10	5/21/2019	Non-Detect	101	2.98	Non-Detect	6.98	1.72	274
GN-GSA-MW-11	5/21/2019	0.0413(J)	11.7	10.4	Non-Detect	5.97	3.55	66
GN-GSA-MW-12	5/21/2019	Non-Detect	77.9	3.02	0.0649(J)	7.1	7.81	231
GN-GSA-MW-13	5/21/2019	Non-Detect	106	3.3	0.0595(J)	7.05	8.29	286
GN-GSA-MW-14S	5/22/2019	Non-Detect	47.1	2.89	0.0601(J)	7.43	5.57	202
GN-GSA-MW-15	5/22/2019	Non-Detect	6.34	1.75	Non-Detect	5.81	2.82	35.3

Notes:

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

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

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

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

4. TDS - Total Dissolved Solids

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

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

		APPENDIX IV						
WELL	SAMPLE DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt
GWPS		0.006	0.01	2	0.004	0.005	0.1	0.006
UNITS		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GN-GSA-MW-1	5/21/2019	0.000909(J)	0.00722	2.51	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-2	5/20/2019	0.00117(J)	Non-Detect	0.0256	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-3	5/22/2019	Non-Detect	Non-Detect	0.0271	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-5	5/20/2019	0.00241(J)	0.00259(J)	0.0671	Non-Detect	Non-Detect	Non-Detect	0.00489(J)
GN-GSA-MW-6	5/20/2019	0.00171(J)	Non-Detect	0.0156	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-7	5/20/2019	0.00123(J)	Non-Detect	0.0163	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-8	5/21/2019	0.00106(J)	0.00128(J)	0.0264	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-9	5/21/2019	0.00112(J)	Non-Detect	0.0249	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-10	5/21/2019	0.000916(J)	Non-Detect	0.0323	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-11	5/21/2019	Non-Detect	Non-Detect	0.0056(J)	Non-Detect	Non-Detect	Non-Detect	0.00245(J)
GN-GSA-MW-12	5/21/2019	0.000813(J)	Non-Detect	0.0214	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-13	5/21/2019	0.00127(J)	0.00348(J)	0.0697	Non-Detect	Non-Detect	0.002(J)	0.0578
GN-GSA-MW-14S	5/22/2019	Non-Detect	Non-Detect	0.0257	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-15	5/22/2019	Non-Detect	Non-Detect	0.00958(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect

Notes:

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

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

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

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

4. TDS - Total Dissolved Solids

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

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

WELL	SAMPLE DATE	APPENDIX IV							
		Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
GWPS		5	4	0.015	0.04	0.002	0.1	0.05	0.002
UNITS		pCi/L	mg/L						
GN-GSA-MW-1	5/21/2019	1.38	0.264	Non-Detect	Non-Detect	Non-Detect	0.00504(J)	Non-Detect	Non-Detect
GN-GSA-MW-2	5/20/2019	0.435	Non-Detect						
GN-GSA-MW-3	5/22/2019	0.643(U)	0.0515(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-5	5/20/2019	-0.251(U)	0.0842(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-6	5/20/2019	0.498	Non-Detect						
GN-GSA-MW-7	5/20/2019	0.465	0.0919(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-8	5/21/2019	0.21(U)	0.109	Non-Detect	Non-Detect	Non-Detect	0.00379(J)	Non-Detect	Non-Detect
GN-GSA-MW-9	5/21/2019	0.289(U)	0.0526(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-10	5/21/2019	5.12(U)	Non-Detect						
GN-GSA-MW-11	5/21/2019	0.0995(U)	Non-Detect						
GN-GSA-MW-12	5/21/2019	0.376(U)	0.0649(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-13	5/21/2019	0.503(U)	0.0595(J)	0.00228(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-14S	5/22/2019	0.24(U)	0.0601(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-15	5/22/2019	0.588	Non-Detect						

Notes:

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

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

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

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

4. TDS - Total Dissolved Solids

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

**Table 8.**  
**Second Semi-Annual Monitoring Event Analytical Summary**

		APPENDIX III						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
GN-GSA-MW-1	9/4/2019	0.0363(J)	41.4	2.39	0.33	7.4	4.82	200
GN-GSA-MW-2	9/4/2019	Non-Detect	89.8	3.56	Non-Detect	7.16	9.25	297
GN-GSA-MW-3	9/4/2019	Non-Detect	76.4	2.92	0.0594(J)	6.71	10.9	225
GN-GSA-MW-5	9/4/2019	0.0641(J)	57.9	11.9	0.0962(J)	6.81	56.3	388
GN-GSA-MW-6	9/4/2019	Non-Detect	0.872	3.21	Non-Detect	4.59	Non-Detect	Non-Detect
GN-GSA-MW-7	9/4/2019	Non-Detect	72	4.31	0.07(J)	6.78	10.1	233
GN-GSA-MW-8	9/3/2019	Non-Detect	57.4	1.64	0.123	7.46	4.15	184
GN-GSA-MW-9	9/3/2019	Non-Detect	60.3	2.26	0.0554(J)	6.53	6.53	189
GN-GSA-MW-10	9/3/2019	Non-Detect	102	2.84	Non-Detect	6.67	1.73	260
GN-GSA-MW-11	9/3/2019	0.0452(J)	8.9	7.1	Non-Detect	5.12	2.83	51.3
GN-GSA-MW-12	9/4/2019	Non-Detect	74.2	2.73	0.0547(J)	7.24	6.25	217
GN-GSA-MW-13	9/4/2019	Non-Detect	93.7	3.33	0.0555(J)	6.71	8.18	271
GN-GSA-MW-14S	9/4/2019	Non-Detect	47.4	2.88	0.0703(J)	7.45	6.37	195
GN-GSA-MW-15	9/4/2019	Non-Detect	6.07	1.95	Non-Detect	5.67	2.3	28

Notes:

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

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

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

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

4. TDS - Total Dissolved Solids

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

**Table 8.**  
**Second Semi-Annual Monitoring Event Analytical Summary**

		APPENDIX IV						
WELL	SAMPLE DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt
GWPS		0.006	0.01	2	0.004	0.005	0.1	0.006
UNITS		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GN-GSA-MW-1	9/4/2019	Non-Detect	0.00534	1.96	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-2	9/4/2019	Non-Detect	Non-Detect	0.0325	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-3	9/4/2019	Non-Detect	Non-Detect	0.0358	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-5	9/4/2019	Non-Detect	0.00305(J)	0.0824	Non-Detect	Non-Detect	Non-Detect	0.00527
GN-GSA-MW-6	9/4/2019	Non-Detect	Non-Detect	0.0176	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-7	9/4/2019	Non-Detect	Non-Detect	0.0256	Non-Detect	Non-Detect	Non-Detect	0.00217(J)
GN-GSA-MW-8	9/3/2019	Non-Detect	0.00118(J)	0.0314	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-9	9/3/2019	Non-Detect	Non-Detect	0.0271	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-10	9/3/2019	Non-Detect	Non-Detect	0.0377	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-11	9/3/2019	Non-Detect	Non-Detect	0.00656(J)	Non-Detect	Non-Detect	Non-Detect	0.00298(J)
GN-GSA-MW-12	9/4/2019	Non-Detect	Non-Detect	0.0205	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-13	9/4/2019	Non-Detect	Non-Detect	0.0455	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-14S	9/4/2019	Non-Detect	Non-Detect	0.0303	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-15	9/4/2019	Non-Detect	Non-Detect	0.00964(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect

Notes:

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

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

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

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

4. TDS - Total Dissolved Solids

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

**Table 8.**  
**Second Semi-Annual Monitoring Event Analytical Summary**

WELL	SAMPLE DATE	APPENDIX IV							
		Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
GWPS		5	4	0.015	0.04	0.002	0.1	0.05	0.002
UNITS		pCi/L	mg/L						
GN-GSA-MW-1	9/4/2019	2.39	0.33	Non-Detect	Non-Detect	Non-Detect	0.00504(J)	Non-Detect	Non-Detect
GN-GSA-MW-2	9/4/2019	0.347(U)	Non-Detect						
GN-GSA-MW-3	9/4/2019	2.36	0.0594(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-5	9/4/2019	1.05	0.0962(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-6	9/4/2019	0.608	Non-Detect						
GN-GSA-MW-7	9/4/2019	1.28	0.07(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-8	9/3/2019	0.983	0.123	Non-Detect	Non-Detect	Non-Detect	0.00437(J)	Non-Detect	Non-Detect
GN-GSA-MW-9	9/3/2019	0.994	0.0554(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-10	9/3/2019	0.793	Non-Detect						
GN-GSA-MW-11	9/3/2019	3.47	Non-Detect						
GN-GSA-MW-12	9/4/2019	0.534	0.0547(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-13	9/4/2019	3.92	0.0555(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-14S	9/4/2019	2.02	0.0703(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GN-GSA-MW-15	9/4/2019	1.06	Non-Detect						

Notes:

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

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

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

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

4. TDS - Total Dissolved Solids

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

# Appendix A

## Monitoring Network Status Summary

Well ID	Purpose	Summary of Sampling Events															
		March 23 - 24, 2016	May 10-11, 2016	July 5-8, 2016	August 22-25, 2016	September 6-9, 2016	November 8-10, 2016	January 3-5, 2017	February 20-23, 2017	May 30 - June 1, 2017	July 5-7, 2017	September 5-9, 2017	February 5-9, 2018	June 11-14, 2018	October 22-26, 2018	May 20-23 2019	September 3-6, 2019
Purpose of Sampling Event																	
GN-GSA-MW-1	Upgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-2	Upgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-3	Upgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-5	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-6	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-7	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-8	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-9	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-10	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-11	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-12	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-13	Downgradient	BG01	BG02	BG03	--	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-14S	Downgradient	--	--	--	BG01	BG04	BG05	--	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04
GN-GSA-MW-15	Downgradient	--	--	--	BG01	BG03	BG04	BG05	BG06	BG07	BG08	D01	S01	ASM01	ASM02	ASM03	ASM04

## **Appendix A**

### **Abbreviations**

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

# Analytical Data Summary

## Plant Gaston Gypsum Pond

### Alabama Power Company

APPENDIX III												APPENDIX IV											
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L						
GN-GSA-MW-1	3/24/2016	0.0331(J)	36.9	3.35	0.325	7.7	6.04	203	0.00116(J)	0.0044	1.45	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.2	0.325	Non-Detect	Non-Detect	Non-Detect	0.0241	Non-Detect	Non-Detect
GN-GSA-MW-1	5/10/2016	0.0334(J)	37.9	3.06	0.33	7.67	5.47	204	0.000629(J)	0.041	1.83	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.994	0.33	Non-Detect	Non-Detect	Non-Detect	0.0239	Non-Detect	Non-Detect
GN-GSA-MW-1	7/5/2016	0.0359(J)	35.3	2.9	0.325	7.68	4.8	188	0.000718(J)	0.0333	1.71	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.971	0.325	Non-Detect	Non-Detect	Non-Detect	0.0176	Non-Detect	Non-Detect
GN-GSA-MW-1	9/6/2016	0.0316(J)	34.8	2.54	0.315	7.8	3.91	188	0.000833(J)	0.0289	1.65	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.09	0.315	Non-Detect	Non-Detect	Non-Detect	0.0138	Non-Detect	Non-Detect
GN-GSA-MW-1	11/8/2016	0.0361(J)	34.3	2.34	0.227(J)	7.74	2.95	197	Non-Detect	0.0241	1.6	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.13	0.227(J)	Non-Detect	Non-Detect	Non-Detect	0.0102	Non-Detect	Non-Detect
GN-GSA-MW-1	2/22/2017	0.0280(J)	35.9	2.9	0.34	7.61	3.3(J)	165	Non-Detect	0.0192	1.53	Non-Detect	Non-Detect	Non-Detect	Non-Detect	n/a	0.34	Non-Detect	Non-Detect	Non-Detect	0.0102	Non-Detect	Non-Detect
GN-GSA-MW-1	3/1/2017	n/a	n/a	n/a	n/a	7.82	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.736	n/a						
GN-GSA-MW-1	5/31/2017	0.0297(J)	34.3	2.7	0.3	7.7	3.4(J)	244	Non-Detect	0.0154	1.66	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.961	0.3	Non-Detect	Non-Detect	Non-Detect	0.00805(J)	Non-Detect	Non-Detect
GN-GSA-MW-1	7/5/2017	0.0302(J)	35.5	2.2	0.3	7.66	3.4(J)	201	Non-Detect	0.0155	1.66	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.1	0.3	Non-Detect	Non-Detect	Non-Detect	0.009(J)	Non-Detect	Non-Detect
GN-GSA-MW-1	9/7/2017	0.0345(J)	36.7	2.9	0.37	7.7	3.6(J)	196	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.37	n/a						
GN-GSA-MW-1	2/5/2018	n/a	n/a	0.37	7.78	n/a	n/a	Non-Detect	0.0014	1.8	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.596	0.37	Non-Detect	Non-Detect	Non-Detect	0.00689(J)	Non-Detect	Non-Detect	
GN-GSA-MW-1	6/1/2018	0.0331(J)	34.2	2.4	0.32	7.62	4.201	210	Non-Detect	0.011	2.2	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.89	0.32	Non-Detect	Non-Detect	Non-Detect	0.00655(J)	Non-Detect	Non-Detect
GN-GSA-MW-1	10/23/2018	0.0345(J)	38.9	2.1	0.39	7.65	3.0(J)	195	Non-Detect	0.00829	2.22	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.14	0.39	Non-Detect	Non-Detect	Non-Detect	0.0061(J)	Non-Detect	Non-Detect
GN-GSA-MW-1	5/21/2019	0.0376(J)	47.8	2.6	0.264	7.5	4.58	244	0.000999(J)	0.00722	2.51	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.38	0.264	Non-Detect	Non-Detect	Non-Detect	0.00504(J)	Non-Detect	Non-Detect
GN-GSA-MW-1	9/4/2019	0.0363(J)	41.4	2.39	0.33	7.4	4.82	200	Non-Detect	0.00534	1.96	Non-Detect	Non-Detect	Non-Detect	Non-Detect	2.39	0.33	Non-Detect	Non-Detect	Non-Detect	0.00504(J)	Non-Detect	Non-Detect

# **Analytical Data Summary**

## **Plant Gaston Gypsum Pond**

### **Alabama Power Company**

# **Analytical Data Summary**

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# Analytical Data Summary

## Plant Gaston Gypsum Pond

### Alabama Power Company

APPENDIX III												APPENDIX IV											
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L						
GN-GSA-MW-8	3/24/2016	Non-Detect	57.4	1.73	0.133(U)	7.45	2.42	179	Non-Detect	0.00112(U)	0.0249	Non-Detect	Non-Detect	Non-Detect	Non-Detect	2	0.132(U)	Non-Detect	Non-Detect	Non-Detect	0.00317(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	5/11/2016	Non-Detect	57	1.68	0.176(U)	7.48	2.16	195	Non-Detect	0.00124(U)	0.0291	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.202(U)	0.176(U)	Non-Detect	Non-Detect	Non-Detect	0.00424(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	7/6/2016	Non-Detect	56.7	1.68	0.167(U)	7.46	1.7	192	Non-Detect	0.00124(U)	0.0317	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.291(U)	0.167(U)	Non-Detect	Non-Detect	Non-Detect	0.00489(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	9/6/2016	Non-Detect	57.3	1.7	0.153(U)	7.44	1.31	193	Non-Detect	0.00137(U)	0.0312	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.0526(U)	0.153(U)	Non-Detect	Non-Detect	Non-Detect	0.00466(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	11/8/2016	Non-Detect	59.4	2.03	0.043(U)	7.37	1.4	198	Non-Detect	0.00162(U)	0.0349	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.364(U)	0.043(U)	Non-Detect	Non-Detect	Non-Detect	0.00422(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	2/20/2017	Non-Detect	57.7	2.3	0.15	7.36	2(U)	195	Non-Detect	0.00127(U)	0.0264	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.174(U)	0.15	Non-Detect	Non-Detect	Non-Detect	0.00422(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	5/30/2017	Non-Detect	52.5	2.2	0.14	7.38	1.6(U)	184	Non-Detect	0.00129(U)	0.027	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.368(U)	0.14	Non-Detect	Non-Detect	Non-Detect	0.00344(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	7/5/2017	Non-Detect	52.7	1.6(U)	0.13	7.44	1.9(U)	194	Non-Detect	0.00116(U)	0.0245	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.224(U)	0.13	Non-Detect	Non-Detect	Non-Detect	0.00369(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	9/7/2017	Non-Detect	58.4	2.4	0.13	7.41	2.1(U)	193	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.13	n/a						
GN-GSA-MW-8	2/6/2018	n/a	n/a	n/a	0.15	7.41	n/a	n/a	Non-Detect	0.00131(U)	0.0248	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.011(U)	0.15	Non-Detect	Non-Detect	Non-Detect	0.00331(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	6/12/2018	Non-Detect	53.7	1.9(U)	0.13	7.4	2.7(U)	186	Non-Detect	0.00115(U)	0.0299	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.324(U)	0.13	Non-Detect	Non-Detect	Non-Detect	0.00325(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	10/12/2018	Non-Detect	53.4	1.5	0.15	7.33	2.2(U)	184	Non-Detect	0.00107(U)	0.0314	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.13	0.15	Non-Detect	Non-Detect	Non-Detect	0.00399(U)	Non-Detect	Non-Detect
GN-GSA-MW-8	5/21/2019	Non-Detect	55.7	1.51	0.109	7.31	3.39	185	0.00106(U)	0.0284	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.21(U)	0.109	Non-Detect	Non-Detect	Non-Detect	0.00379(U)	Non-Detect	Non-Detect	
GN-GSA-MW-8	9/3/2019	Non-Detect	57.4	1.64	0.123	7.46	4.15	184	Non-Detect	0.00118(U)	0.0314	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.983	0.123	Non-Detect	Non-Detect	Non-Detect	0.00437(U)	Non-Detect	Non-Detect

# **Analytical Data Summary**

## **Plant Gaston Gypsum Pond**

### **Alabama Power Company**

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# **Analytical Data Summary Plant Gaston Gypsum Pond Alabama Power Company**

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## **Plant Gaston Gypsum Pond**

### **Alabama Power Company**

# **Appendix B**

1st

Semi-Annual

Monitoring Event

## **E. C. Gaston Gypsum Storage Area**

### **2019 Compliance Event 1**

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

When collecting water level measurements on the first day of sampling, it was noted that the lock for well MW-13 was not locked. The protective casing cap was closed but the lock was not secured. The well and area surrounding the well, otherwise, appeared as normal.

Field quality control procedures were performed as follows:

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

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

## Analytical Report

 Alabama Power



**Sample Group :** WMWGASG\_1225

**Project/Site :** Gaston Gypsum  
Wilsonville, AL 35186

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

**Attention :** Dustin Brooks, Greg Dyer, & Lauren Parker

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

The following data has been reviewed and approved by:

**Quality Control:**  **Laura Midkiff**

Digitally signed by Laura Midkiff  
DN: cn=Laura Midkiff, o=Alabama Power  
Company, ou=Environmental Affairs,  
email=lmidkif@southernco.com, c=US  
Date: 2019.06.19 17:02:12 -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=tmaske@southernco.com,  
c=US  
Date: 2019.06.20 07:36:10 -05'00"

Metals ICP

Gaston Gypsum

WMWGASG\_1225

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ12268	647305	WMWGASG_1225
AZ12269	647305	WMWGASG_1225
AZ12270	647305	WMWGASG_1225
AZ12271	647305	WMWGASG_1225
AZ12272	647305	WMWGASG_1225
AZ12273	647305	WMWGASG_1225
AZ12274	647305	WMWGASG_1225
AZ12275	647305	WMWGASG_1225
AZ12276	647305	WMWGASG_1225
AZ12277	647305	WMWGASG_1225
AZ12278	647306	WMWGASG_1225
AZ12279	647306	WMWGASG_1225
AZ12280	647306	WMWGASG_1225
AZ12281	647306	WMWGASG_1225
AZ12282	647306	WMWGASG_1225
AZ12283	647306	WMWGASG_1225
AZ12284	647306	WMWGASG_1225
AZ12285	647306	WMWGASG_1225
AZ12286	647306	WMWGASG_1225

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

### General Quality Control Procedures:

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

### Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
  - AZ12277 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:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ12268	Calcium	x10.15
AZ12272	Calcium	x10.15
AZ12273	Calcium	x10.15
AZ12274	Calcium	x10.15
AZ12275	Calcium	x10.15
AZ12276	Calcium	x10.15
AZ12277	Calcium	x10.15
AZ12280	Calcium	x10.15
AZ12281	Calcium	x10.15
AZ12282	Calcium	x10.15
AZ12284	Calcium	x10.15
AZ12285	Calcium	x10.15

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

Metals ICPMS

Gaston Gypsum

WMWGASG\_1225

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ12268	648333	WMWGASG_1225
AZ12269	648333	WMWGASG_1225
AZ12270	648333	WMWGASG_1225
AZ12271	648333	WMWGASG_1225
AZ12272	648333	WMWGASG_1225
AZ12273	648333	WMWGASG_1225
AZ12274	648333	WMWGASG_1225
AZ12275	648333	WMWGASG_1225
AZ12276	648333	WMWGASG_1225
AZ12277	648333	WMWGASG_1225
AZ12278	648334	WMWGASG_1225
AZ12279	648334	WMWGASG_1225
AZ12280	648334	WMWGASG_1225
AZ12281	648334	WMWGASG_1225
AZ12282	648334	WMWGASG_1225
AZ12283	648334	WMWGASG_1225
AZ12284	648334	WMWGASG_1225
AZ12285	648334	WMWGASG_1225
AZ12286	648334	WMWGASG_1225

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.
7. All samples were analyzed at a x5.075 dilution to compensate for potential matrix effects.  
8. The raw data results are shown with dilution factors included.

Mercury

Gaston Gypsum

WMWGASG\_1225

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ12268	647297	WMWGASG_1225
AZ12269	647297	WMWGASG_1225
AZ12270	647297	WMWGASG_1225
AZ12271	647297	WMWGASG_1225
AZ12272	647297	WMWGASG_1225
AZ12273	647297	WMWGASG_1225
AZ12274	647297	WMWGASG_1225
AZ12275	647297	WMWGASG_1225
AZ12276	647297	WMWGASG_1225
AZ12277	647297	WMWGASG_1225
AZ12278	647298	WMWGASG_1225
AZ12279	647298	WMWGASG_1225
AZ12280	647298	WMWGASG_1225
AZ12281	647298	WMWGASG_1225
AZ12282	647298	WMWGASG_1225
AZ12283	647298	WMWGASG_1225
AZ12284	647298	WMWGASG_1225
AZ12285	647298	WMWGASG_1225
AZ12286	647298	WMWGASG_1225

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

Gaston Gypsum

WMWGASG\_1225

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ12268	647448	WMWGASG_1225
AZ12269	647448	WMWGASG_1225
AZ12270	647448	WMWGASG_1225
AZ12271	647448	WMWGASG_1225
AZ12272	647448	WMWGASG_1225
AZ12273	647448	WMWGASG_1225
AZ12274	647448	WMWGASG_1225
AZ12275	647448	WMWGASG_1225
AZ12276	647448	WMWGASG_1225
AZ12277	647449	WMWGASG_1225
AZ12278	647449	WMWGASG_1225
AZ12279	647449	WMWGASG_1225
AZ12280	647449	WMWGASG_1225
AZ12281	647449	WMWGASG_1225
AZ12282	647449	WMWGASG_1225
AZ12283	647449	WMWGASG_1225
AZ12284	647449	WMWGASG_1225
AZ12285	647449	WMWGASG_1225
AZ12286	647449	WMWGASG_1225

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%, except for the following:
  - RPD/2 was greater than 5% for sample AZ12286, but both the original and duplicate results were below the RL. Therefore, the results are acceptable.
- 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:
  - AZ12271
  - AZ12278
  - AZ12286

Anions

Gaston Gypsum

WMWGASG\_1225

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.

<b><u>Sample ID</u></b>	<b><u>Batch ID</u></b>	<b><u>Project ID</u></b>
AZ12268	648750, 648860, & 648917	WMWGASG_1225
AZ12269	648750, 648860, & 648917	WMWGASG_1225
AZ12270	648750, 648860, & 648917	WMWGASG_1225
AZ12271	648750, 648860, & 648917	WMWGASG_1225
AZ12272	648750, 648860, & 648917	WMWGASG_1225
AZ12273	648750, 648860, & 648917	WMWGASG_1225
AZ12274	648750, 648860, & 648917	WMWGASG_1225
AZ12275	648750, 648860, & 648917	WMWGASG_1225
AZ12276	648750, 648860, & 648917	WMWGASG_1225
AZ12277	648750, 648860, & 648917	WMWGASG_1225
AZ12278	648751, 648861, & 648918	WMWGASG_1225
AZ12279	648751, 648861, & 648918	WMWGASG_1225
AZ12280	648751, 648861, & 648918	WMWGASG_1225
AZ12281	648751, 648861, & 648918	WMWGASG_1225
AZ12282	648751, 648861, & 648918	WMWGASG_1225
AZ12283	648751, 648861, & 648918	WMWGASG_1225
AZ12284	648751, 648861, & 648918	WMWGASG_1225
AZ12285	648751, 648861, & 648918	WMWGASG_1225
AZ12286	648751, 648861, & 648918	WMWGASG_1225

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ12268	Sulfate	x10

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

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 20-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AZ12268

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	J	0.00259	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0671	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	J	0.0769	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		58.8	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00241	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	J	0.00489	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		398	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		12.9	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	J	0.0842	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		10	5.00	10		75.6	mg/L
<b>Field Measurements</b>										
PH	AWG	5/20/2019						FA	6.59	SU

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASG  
**Sample Date:** 20-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-5

**Laboratory ID Number:** AZ12268

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 20-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AZ12268

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 20-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AZ12269

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0156	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.1	0.5		0.652	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00171	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		27.3	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		3.15	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1	U	Not Detected	mg/L
<b>Field Measurements</b>										
PH	AWG	5/20/2019						FA 4.59		SU

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASG  
**Sample Date:** 20-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-6

**Laboratory ID Number:** AZ12269

Sample	Analysis	Units	MB			LCS	LCS			Rec			Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec	Limit
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961	20
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12	20
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55	20
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25	20
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06	20
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98	20
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313	20
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896	20
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22	20
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52	20
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36	20
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525	20
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50	20
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79	20
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478	20

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 20-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AZ12269

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 20-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-6 DUP

Laboratory ID Number: AZ12270

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0164	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.1	0.5		0.665	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00157	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		30.7	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		3.16	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1	U	Not Detected	mg/L
<b>Field Measurements</b>										
PH	AWG	5/20/2019						FA 4.59		SU

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

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

## Batch QC Summary



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 20-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-6 DUP

Laboratory ID Number: AZ12270

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

### Comments:

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 20-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-6 DUP

Laboratory ID Number: AZ12270

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASGFB  
 Sample Date: 20-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AZ12271

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00129	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25	U	Not Detected	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1	U	Not Detected	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1	U	Not Detected	mg/L

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASGFB  
**Sample Date:** 20-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum Field Blank

**Laboratory ID Number:** AZ12271

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478

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

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\* 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, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMMWGASGFB  
Sample Date: 20-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AZ12271

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 20-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AZ12272

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0163	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		72.5	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00123	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		218	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		3.25	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	J	0.0919	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		6.85	mg/L
<b>Field Measurements</b>										
PH	AWG	5/20/2019						FA 6.81		SU

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASG  
**Sample Date:** 20-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-7

**Laboratory ID Number:** AZ12272

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 20-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AZ12272

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 20-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AZ12273

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0256	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		87.3	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00117	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		286	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		3.53	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		7.52	mg/L
<b>Field Measurements</b>										
PH	AWG	5/20/2019						FA 7.13		SU

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASG  
**Sample Date:** 20-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-2

**Laboratory ID Number:** AZ12273

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 20-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AZ12273

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AZ12274

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	J	0.00128	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0264	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		55.7	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00106	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	J	0.00379	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		185	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		1.51	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1		0.109	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		3.39	mg/L
<b>Field Measurements</b>										
PH	AWG	5/21/2019						FA 7.31		SU

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASG  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-8

**Laboratory ID Number:** AZ12274

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AZ12274

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AZ12275

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0249	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		51.6	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00112	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		176	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		2.12	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	J	0.0526	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		6.07	mg/L
<b>Field Measurements</b>										
PH	AWG	5/21/2019						FA	6.79	SU

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASG  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-9

**Laboratory ID Number:** AZ12275

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478

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

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\* 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, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AZ12275

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AZ12276

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0323	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		101	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000916	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		274	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		2.98	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		1.72	mg/L
<b>Field Measurements</b>										
PH	AWG	5/21/2019						FA	6.98	SU

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASG  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-10

**Laboratory ID Number:** AZ12276

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130	0.961
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130	3.12
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130	4.55
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130	1.25
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130	5.06
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130	2.98
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130	0.313
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130	0.896
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130	2.22
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130	1.52
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.36
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130	0.525
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130	1.50
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130	2.79
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130	0.478

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AZ12276

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ12276	Solids, Dissolved	mg/L	-4.00	25			268	53.0	40 to 60			1.11	5
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120	4.48	20
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120	0.00	20
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120	2.90	20

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

---

Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-10 DUP

Laboratory ID Number: AZ12277

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0336	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		100	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000896	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		276	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		2.97	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		1.70	mg/L
<b>Field Measurements</b>										
PH	AWG	5/21/2019						FA	6.98	SU

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

Comments: Matrix spike for Calcium is invalid due to sample concentration. LBM 6/17/19

Reported: 6/19/2019  
 Version: 2.0

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASG  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-10 DUP

**Laboratory ID Number:** AZ12277

Sample	Analysis	Units	MB			LCS	LCS Limit	Rec		Prec	Prec Limit
			MB	Limit	Spike			Rec	Limit	Prec	Limit
AZ12277	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0968	0.0977	0.100	0.085 to 0.115	96.8	70 to 130
AZ12277	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.129	0.125	0.0986	0.085 to 0.115	95.8	70 to 130
AZ12277	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0916	0.0959	0.0950	0.085 to 0.115	91.6	70 to 130
AZ12277	Boron, Total	mg/L	0.00357	0.065025	1.00	1.03	1.02	0.999	0.85 to 1.15	103	70 to 130
AZ12277	Calcium, Total	mg/L	0.00237	0.216749	5.00	105	110	5.04	4.25 to 5.75	92.1	70 to 130
AZ12277	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0985	0.0956	0.103	0.085 to 0.115	98.5	70 to 130
AZ12277	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.100	0.107	0.085 to 0.115	101	70 to 130
AZ12277	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0977	0.0968	0.105	0.085 to 0.115	97.7	70 to 130
AZ12277	Mercury, Total by CVAA	mg/L	-0.00007	0.0005	0.004	0.00398	0.00407	0.00414	0.0034 to 0.0046	99.6	70 to 130
AZ12277	Lithium, Total	mg/L	-0.0000223	0.019704	0.20	0.223	0.220	0.204	0.17 to 0.23	112	70 to 130
AZ12277	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130
AZ12277	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0981	0.0986	0.104	0.085 to 0.115	98.1	70 to 130
AZ12277	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.102	0.101	0.0997	0.085 to 0.115	101	70 to 130
AZ12277	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0942	0.0969	0.101	0.085 to 0.115	94.2	70 to 130
AZ12277	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0976	0.0971	0.102	0.085 to 0.115	97.6	70 to 130

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

**Comments:** Matrix spike for Calcium is invalid due to sample concentration. LBM 6/17/19

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-10 DUP

Laboratory ID Number: AZ12277

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12277	Chloride	mg/L	-0.00572	0.50	10.0	13.7	2.84	9.86	9 to 11	107	80 to 120 4.48
AZ12277	Fluoride	mg/L	0.0286	0.05	2.50	2.58	0.0348	2.62	2.25 to 2.75	103	80 to 120 0.00
AZ12277	Sulfate	mg/L	-0.396	0.50	20.0	21.0	1.75	19.5	18 to 22	96.5	80 to 120 2.90
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00 5

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

Comments: Matrix spike for Calcium is invalid due to sample concentration. LBM 6/17/19

CC:

Reported: 6/19/2019  
Version: 2.0

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASGFB  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AZ12278

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25	U	Not Detected	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1	U	Not Detected	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1	U	Not Detected	mg/L

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASGFB  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum Field Blank

**Laboratory ID Number:** AZ12278

Sample	Analysis	Units	MB			LCS	LCS			Rec			Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec	Limit
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08	20
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25	20
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01	20
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216	20
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383	20
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95	20
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88	20
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36	20
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385	20
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293	20
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444	20
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849	20
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60	20
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77	20
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASGFB  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AZ12278

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AZ12279

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	J	0.00560	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	J	0.0413	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.1	0.5		11.7	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	J	0.00245	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		66.0	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		10.4	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		3.55	mg/L
<b>Field Measurements</b>										
PH	AWG	5/21/2019						FA 5.97		SU

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASG  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-11

**Laboratory ID Number:** AZ12279

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AZ12279

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AZ12280

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0214	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		77.9	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000813	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		231	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		3.02	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	J	0.0649	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		7.81	mg/L
<b>Field Measurements</b>										
PH	AWG	5/21/2019						FA 7.1		SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMMWGASG  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-12

**Laboratory ID Number:** AZ12280

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AZ12280

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AZ12281

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	J	0.00348	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0697	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		106	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00127	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005		0.0578	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	J	0.00200	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	J	0.00228	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		286	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		3.30	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	J	0.0595	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		8.29	mg/L
<b>Field Measurements</b>										
PH	AWG	5/21/2019						FA	7.05	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASG  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-13

**Laboratory ID Number:** AZ12281

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AZ12281

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 21-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AZ12282

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005		0.00722	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		2.51	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	J	0.0376	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		47.8	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000909	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	J	0.00504	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		244	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		2.60	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1		0.264	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		4.58	mg/L
<b>Field Measurements</b>										
PH	AWG	5/21/2019						FA 7.5		SU

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASG  
**Sample Date:** 21-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-1

**Laboratory ID Number:** AZ12282

Sample	Analysis	Units	MB			LCS	LCS			Rec			Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec	Limit
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08	20
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25	20
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01	20
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216	20
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383	20
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95	20
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88	20
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36	20
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385	20
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293	20
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444	20
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849	20
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60	20
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77	20
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697	20

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 21-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AZ12282

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 22-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AZ12283

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	J	0.00958	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.1	0.5		6.34	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		35.3	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		1.75	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		2.82	mg/L
<b>Field Measurements</b>										
PH		AWG	5/22/2019					FA	5.81	SU

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASG  
**Sample Date:** 22-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-15

**Laboratory ID Number:** AZ12283

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 22-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AZ12283

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 22-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AZ12284

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0271	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		53.1	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		184	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		2.83	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	J	0.0515	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		11.0	mg/L
<b>Field Measurements</b>										
PH	AWG	5/22/2019						FA	6.38	SU

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASG  
**Sample Date:** 22-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-3

**Laboratory ID Number:** AZ12284

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 22-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AZ12284

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

# Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASG  
 Sample Date: 22-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AZ12285

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01		0.0257	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		10.15	1.015	5.075		47.1	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25		202	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1		2.89	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	J	0.0601	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1		5.57	mg/L
<b>Field Measurements</b>										
PH	AWG	5/22/2019						FA	7.43	SU

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

## Comments:

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASG  
**Sample Date:** 22-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsum - MW-14S

**Laboratory ID Number:** AZ12285

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

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**Comments:**

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASG  
Sample Date: 22-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AZ12285

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

---

Comments:

CC:

Reported: 6/19/2019  
Version: 2.0

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

## Certificate Of Analysis



Alabama Power



To: Dustin Brooks  
 Greg Dyer  
 Lauren Parker

Customer Account: WMMWGASGEB  
 Sample Date: 22-May-19  
 Customer ID:  
 Delivery Date: 22-May-19

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AZ12286

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	RDA	5/31/2019	EPA 200.7		1.015	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	GAS	5/28/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	RDA	5/31/2019	EPA 200.7		1.015	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	5/29/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	5/28/2019	SM 2540C		1		25	U	Not Detected	mg/L
Solids, Dissolved Filter Date	TJW	5/23/2019	SM 2540C		1				05/23/2019	Date
* Chloride	JCC	6/10/2019	SM4500CI E		1	0.50	1	U	Not Detected	mg/L
* Fluoride	JCC	6/11/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	6/12/2019	SM4500SO4 E		1	0.50	1	U	Not Detected	mg/L

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

**Comments:** TDS precision was out of specification limit, but the results were below the RL. Therefore, the results are acceptable.

LBM 6/17/19

Reported: 6/19/2019  
 Version: 2.0

**To:** Dustin Brooks  
 Greg Dyer  
 Lauren Parker

**Customer Account:** WMWGASGEB  
**Sample Date:** 22-May-19  
**Customer ID:**  
**Delivery Date:** 22-May-19

**Description:** Gaston Gypsumd Equipment Blank

**Laboratory ID Number:** AZ12286

Sample	Analysis	Units	MB			LCS	LCS			Rec		Prec
			MB	Limit	Spike		MS	MSD	Limit	Rec	Limit	Prec
AZ12286	Arsenic, Total	mg/L	0.00000238	0.0022	0.10	0.0967	0.0998	0.100	0.085 to 0.115	96.7	70 to 130	3.08
AZ12286	Barium, Total	mg/L	0.0000262	0.0044	0.10	0.0941	0.0991	0.0986	0.085 to 0.115	94.1	70 to 130	5.25
AZ12286	Beryllium, Total	mg/L	0.0000321	0.00132	0.10	0.0935	0.0925	0.0950	0.085 to 0.115	93.5	70 to 130	1.01
AZ12286	Boron, Total	mg/L	0.00306	0.065025	1.00	0.996	0.998	1.00	0.85 to 1.15	99.6	70 to 130	0.216
AZ12286	Calcium, Total	mg/L	0.000812	0.216749	5.00	4.94	4.96	5.05	4.25 to 5.75	98.8	70 to 130	0.383
AZ12286	Cadmium, Total	mg/L	0.00000143	0.00066	0.10	0.0969	0.104	0.103	0.085 to 0.115	96.9	70 to 130	6.95
AZ12286	Cobalt, Total	mg/L	-0.00000068	0.0044	0.10	0.101	0.106	0.107	0.085 to 0.115	101	70 to 130	4.88
AZ12286	Chromium, Total	mg/L	-0.000103	0.0044	0.10	0.0975	0.103	0.105	0.085 to 0.115	97.5	70 to 130	5.36
AZ12286	Mercury, Total by CVAA	mg/L	-0.0000120	0.0005	0.004	0.00427	0.00425	0.00419	0.0034 to 0.0046	107	70 to 130	0.385
AZ12286	Lithium, Total	mg/L	-0.0000809	0.019704	0.20	0.203	0.202	0.205	0.17 to 0.23	101	70 to 130	0.293
AZ12286	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.107	0.107	0.105	0.085 to 0.115	107	70 to 130	0.0444
AZ12286	Lead, Total	mg/L	0.00000906	0.0022	0.10	0.0999	0.101	0.104	0.085 to 0.115	99.9	70 to 130	0.849
AZ12286	Antimony, Total	mg/L	0.000285	0.00176	0.10	0.0971	0.101	0.0997	0.085 to 0.115	97.1	70 to 130	3.60
AZ12286	Selenium, Total	mg/L	0.0000602	0.0044	0.10	0.0964	0.0929	0.101	0.085 to 0.115	96.4	70 to 130	3.77
AZ12286	Thallium, Total	mg/L	0.00000157	0.00044	0.10	0.0998	0.0991	0.102	0.085 to 0.115	99.8	70 to 130	0.697

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

**Comments:** TDS precision was out of specification limit, but the results were below the RL. Therefore, the results are acceptable.

LBM 6/17/19

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

## Batch QC Summary



Alabama Power



To: Dustin Brooks  
Greg Dyer  
Lauren Parker

Customer Account: WMWGASGEB  
Sample Date: 22-May-19  
Customer ID:  
Delivery Date: 22-May-19

Description: Gaston Gypsumd Equipment Blank

Laboratory ID Number: AZ12286

Sample	Analysis	Units	MB		Sample		LCS		Rec		Prec
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Prec
AZ12286	Chloride	mg/L	-0.00496	0.50	10.0	9.85	0.0974	9.87	9 to 11	98.5	80 to 120
AZ12286	Fluoride	mg/L	0.0314	0.05	2.50	2.71	0.0362	2.61	2.25 to 2.75	108	80 to 120
AZ12286	Sulfate	mg/L	-0.429	0.50	20.0	21.1	-0.483	19.5	18 to 22	106	80 to 120
AZ12286	Solids, Dissolved	mg/L	-4.00	25			0.67	53.0	40 to 60		0.00
											5

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2020

Comments: TDS precision was out of specification limit, but the results were below the RL. Therefore, the results are acceptable.

LBM 6/17/19

CC:

Reported: 6/19/2019  
Version: 2.0

## Definitions



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

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



# Chain of Custody

## Groundwater

APC General Testing Laboratory

 Field Complete Outside Lab Lab Complete

Lab ETA 05/22/2019 13:44

Requested Complete Date	Routine			Results To	Dustin Brooks, Greg Dyer, Lauren Parker							
Site Representative	Tanisha Fenderson			Requested By	Lauren Parker							
Collector	Anthony Goggins			Location	Gaston Gypsum							
Bottles	1	Metals	500 mL	3	TDS	500 mL	5	N/A	N/A	7	N/A	N/A
	2	Hg	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A
Comments												

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	5/20/2019	11:33	4	Groundwater		AZ12268
MW-6	05/20/2019	12:46	4	Groundwater		AZ12269
MW-6DUP	05/20/2019	12:46	4	Sample Duplicate		AZ12270
FB-1	05/20/2019	13:25	4	Field Blank		AZ12271
MW-7	05/20/2019	14:06	4	Groundwater		AZ12272
MW-2	05/20/2019	15:56	4	Groundwater		AZ12273
MW-8	05/21/2019	08:24	4	Groundwater		AZ12274
MW-9	05/21/2019	09:36	4	Groundwater		AZ12275
MW-10	05/21/2019	10:16	4	Groundwater		AZ12276
MW-10DUP	05/21/2019	10:16	4	Sample Duplicate		AZ12277
FB-2	05/21/2019	10:50	4	Field Blank		AZ12278
MW-11	05/21/2019	11:33	4	Groundwater		AZ12279
MW-12	05/21/2019	12:19	4	Groundwater		AZ12280
MW-13	05/21/2019	12:58	4	Groundwater		AZ12281
MW-1	05/21/2019	13:44	4	Groundwater		AZ12282
MW-15	05/22/2019	09:07	4	Groundwater		AZ12283
MW-3	05/22/2019	10:22	4	Groundwater		AZ12284
MW-14S	05/22/2019	11:19	4	Groundwater		AZ12285
EB-1	05/22/2019	11:30	4	Equipment Blank		AZ12286

Relinquished By

Received By

Date/Time

05/22/2019 14:16

SmarTroll ID 7151-38849-2-1

All metals and radiological bottles have pH < 2 

Turbidity ID 5160-26211-1-1

Cooler Temp 3.2 degrees C

Sample Event 1225

Thermometer ID 6603-34819-1-1

pH Strip ID 7260-39349-1-1; 7267-39374-6-6



# Chain of Custody

## Groundwater

APC General Testing Laboratory

 Field Complete Outside Lab Lab Complete

Lab ETA 05/22/2019 13:44

Requested Complete Date	Routine			Results To	Dustin Brooks, Greg Dyer, Lauren Parker							
Site Representative	Tanisha Fenderson			Requested By	Lauren Parker							
Collector	Anthony Goggins			Location	Gaston 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 Duplicate collected at MW-8 and MW-14S. LBM 5/22/19											

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	5/20/2019	11:33	1	Groundwater		AZ12287
MW-6	05/20/2019	12:46	1	Groundwater		AZ12288
MW-6DUP	05/20/2019	12:46	1	Sample Duplicate		AZ12289
FB-1	05/20/2019	13:25	1	Field Blank		AZ12290
MW-7	05/20/2019	14:06	1	Groundwater		AZ12291
MW-2	05/20/2019	15:56	1	Groundwater		AZ12292
MW-8	05/21/2019	08:24	3	Groundwater		AZ12293
MW-9	05/21/2019	09:36	1	Groundwater		AZ12294
MW-10	05/21/2019	10:16	1	Groundwater		AZ12295
MW-10DUP	05/21/2019	10:16	1	Sample Duplicate		AZ12296
FB-2	05/21/2019	10:50	1	Field Blank		AZ12297
MW-11	05/21/2019	11:33	1	Groundwater		AZ12298
MW-12	05/21/2019	12:19	1	Groundwater		AZ12299
MW-13	05/21/2019	12:58	1	Groundwater		AZ12300
MW-1	05/21/2019	13:44	1	Groundwater		AZ12301
MW-15	05/22/2019	09:07	1	Groundwater		AZ12302
MW-3	05/22/2019	10:22	1	Groundwater		AZ12303
MW-14S	05/22/2019	11:19	3	Groundwater		AZ12304
EB-1	05/22/2019	11:30	1	Equipment Blank		AZ12305

Relinquished By

Received By

Date/Time

05/22/2019 14:16

SmarTroll ID	7151-38849-2-1	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	Cooler Temp	N/A
Sample Event	1225	Thermometer ID	N/A
		pH Strip ID	7260-39349-1-1; 7267-39374-6-6



## ANALYTICAL REPORT

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

Laboratory Job ID: 400-170707-1

Laboratory Sample Delivery Group: Gaston Gypsum 1225  
Client Project/Site: CCR Plant Gaston

For:

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

Attn: Laura Midkiff



Authorized for release by:  
8/30/2019 12:46:54 PM

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

### LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Method Summary .....	5
Sample Summary .....	6
Client Sample Results .....	7
Definitions .....	26
Chronicle .....	27
QC Association .....	32
QC Sample Results .....	34
Chain of Custody .....	40
Receipt Checklists .....	41
Certification Summary .....	43

# Case Narrative

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

Job ID: 400-170707-1  
SDG: Gaston Gypsum 1225

## Job ID: 400-170707-1

Laboratory: Eurofins TestAmerica, Pensacola

### Narrative

#### Job Narrative 400-170707-1

##### RAD

Method(s) 9315: Ra-226 Prep Batch 160-431147. 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. AZ12297 FB-2 (400-170707-11), AZ12298 MW-11 (400-170707-12), AZ12299 MW-12 (400-170707-13), (LCS 160-431147/1-A), (LCSD 160-431147/2-A) and (MB 160-431147/23-A)

Method(s) 9315: Ra-226 Prep Batch 160-431495. 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. AZ12300 MW-13 (400-170707-14), AZ12301 MW-1 (400-170707-15), AZ12302 MW-15 (400-170707-16), AZ12303 MW-3 (400-170707-17), AZ12304 MW-14S (400-170707-18), AZ12304 MW-14S (400-170707-18[DU]), AZ12305 EB-1 (400-170707-19), (LCS 160-431495/1-A) and (MB 160-431495/23-A)

Method(s) 9315: Ra-226 Prep Batch 160-431481. 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. AZ12287 MW-5 (400-170707-1), AZ12288 MW-6 (400-170707-2), AZ12289 MW-6 DUP (400-170707-3), AZ12290 FB-1 (400-170707-4), AZ12291 MW-7 (400-170707-5), AZ12292 MW-2 (400-170707-6), AZ12293 MW-8 (400-170707-7), AZ12293 MW-8 (400-170707-7[DU]), AZ12294 MW-9 (400-170707-8), AZ12295 MW-10 (400-170707-9), AZ12296 MW-10 DUP (400-170707-10), (LCS 160-431481/1-A) and (MB 160-431481/23-A)

Method(s) 9320: Ra-228 Prep Batch 160-431600. 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. AZ12300 MW-13 (400-170707-14), AZ12301 MW-1 (400-170707-15), AZ12302 MW-15 (400-170707-16), AZ12303 MW-3 (400-170707-17), AZ12304 MW-14S (400-170707-18), AZ12304 MW-14S (400-170707-18[DU]), AZ12305 EB-1 (400-170707-19), (LCS 160-431600/1-A) and (MB 160-431600/23-A)

Method(s) 9320: Ra-228 Prep Batch 160-431164. 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. AZ12297 FB-2 (400-170707-11), AZ12298 MW-11 (400-170707-12), AZ12299 MW-12 (400-170707-13), (LCS 160-431164/1-A), (LCSD 160-431164/2-A) and (MB 160-431164/23-A)

Method(s) 9320: Ra-228 Prep Batch 160-436834. 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. AZ12293 MW-8 (400-170707-7)

Method(s) 9320: Ra-228 Prep Batch 160-431494. Due to laboratory error, the method blank (MB) did not get counted before the short-lived Ac-228 decayed out. Thus, there is no negative control for the batch to evaluate for possible batch contamination. There is limited aliquot to perform re-preparation/re-analysis such that the achievable MDC would be higher than desired. Results are reported from this batch at client direction. AZ12287 MW-5 (400-170707-1), AZ12288 MW-6 (400-170707-2), AZ12289 MW-6 DUP (400-170707-3), AZ12290 FB-1 (400-170707-4), AZ12291 MW-7 (400-170707-5), AZ12292 MW-2 (400-170707-6), AZ12293 MW-8 (400-170707-7), AZ12293 MW-8 (400-170707-7[DU]) and (LCS 160-431494/1-A)

Method(s) 9320: Ra-228 Prep Batch 160-431494. 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. AZ12287 MW-5 (400-170707-1), AZ12288 MW-6 (400-170707-2), AZ12289 MW-6 DUP (400-170707-3), AZ12290 FB-1 (400-170707-4), AZ12291 MW-7 (400-170707-5), AZ12292 MW-2 (400-170707-6), AZ12293 MW-8 (400-170707-7), AZ12293 MW-8 (400-170707-7[DU]) and (LCS 160-431494/1-A)

Method(s) 9320: Ra-228 Prep Batch 160-440084. The detection goal was not met for the following samples due to limited sample available for analysis. Analytical results are reported with the detection limit achieved. AZ12295 MW-10 (400-170707-9), AZ12296 MW-10 DUP (400-170707-10) and (MB 160-440084/5-A)

Method(s) 9320: Ra-228 Prep Batch 160-440084. Radiochemistry sample results are reported with the count date/time applied as the

## Case Narrative

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

Job ID: 400-170707-1  
SDG: Gaston Gypsum 1225

### Job ID: 400-170707-1 (Continued)

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

Activity Reference Date. AZ12295 MW-10 (400-170707-9), AZ12296 MW-10 DUP (400-170707-10), (LCS 160-440084/1-A), (LCSD 160-440084/2-A) and (MB 160-440084/5-A)

Method(s) 9320: Ra-228 Prep Batch 160-440084. 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. AZ12295 MW-10 (400-170707-9), AZ12296 MW-10 DUP (400-170707-10), (LCS 160-440084/1-A), (LCSD 160-440084/2-A) and (MB 160-440084/5-A)

Method(s) PrecSep\_0: Radium 228 Prep Batch 160-431164. Insufficient sample volume was available to perform a sample duplicate for the following samples: AZ12297 FB-2 (400-170707-11), AZ12298 MW-11 (400-170707-12) and AZ12299 MW-12 (400-170707-13). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) PrecSep\_0: Radium 228 Prep Batch 160-440084. Insufficient sample volume was available to perform a sample duplicate for the following samples: AZ12295 MW-10 (400-170707-9) and AZ12296 MW-10 DUP (400-170707-10). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) PrecSep-21: Radium 226 Prep Batch 160-431147. Insufficient sample volume was available to perform a sample duplicate for the following samples: AZ12297 FB-2 (400-170707-11), AZ12298 MW-11 (400-170707-12) and AZ12299 MW-12 (400-170707-13). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) Ra226\_Ra228: Radium-226/228 Combined Calculation Batch. 160-441472. The detection goal was not met for the following samples due to insufficient sample available for analysis: AZ12295 MW-10 (400-170707-9) and AZ12296 MW-10 DUP (400-170707-10). Analytical results are reported with the detection limit achieved.

## Method Summary

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

Job ID: 400-170707-1  
SDG: Gaston Gypsum 1225

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

### Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

### Laboratory References:

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

# Sample Summary

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-170707-1	AZ12287 MW-5	Water	05/20/19 11:33	05/24/19 16:30	
400-170707-2	AZ12288 MW-6	Water	05/20/19 12:46	05/24/19 16:30	
400-170707-3	AZ12289 MW-6 DUP	Water	05/20/19 12:46	05/24/19 16:30	
400-170707-4	AZ12290 FB-1	Water	05/20/19 13:25	05/24/19 16:30	
400-170707-5	AZ12291 MW-7	Water	05/20/19 14:06	05/24/19 16:30	
400-170707-6	AZ12292 MW-2	Water	05/20/19 15:56	05/24/19 16:30	
400-170707-7	AZ12293 MW-8	Water	05/21/19 08:24	05/24/19 16:30	
400-170707-8	AZ12294 MW-9	Water	05/21/19 09:36	05/24/19 16:30	
400-170707-9	AZ12295 MW-10	Water	05/21/19 10:16	05/24/19 16:30	
400-170707-10	AZ12296 MW-10 DUP	Water	05/21/19 10:16	05/24/19 16:30	
400-170707-11	AZ12297 FB-2	Water	05/21/19 10:50	05/24/19 16:30	
400-170707-12	AZ12298 MW-11	Water	05/21/19 11:33	05/24/19 16:30	
400-170707-13	AZ12299 MW-12	Water	05/21/19 12:19	05/24/19 16:30	
400-170707-14	AZ12300 MW-13	Water	05/21/19 12:58	05/24/19 16:30	
400-170707-15	AZ12301 MW-1	Water	05/21/19 13:44	05/24/19 16:30	
400-170707-16	AZ12302 MW-15	Water	05/22/19 09:07	05/24/19 16:30	
400-170707-17	AZ12303 MW-3	Water	05/22/19 10:22	05/24/19 16:30	
400-170707-18	AZ12304 MW-14S	Water	05/22/19 11:19	05/24/19 16:30	
400-170707-19	AZ12305 EB-1	Water	05/22/19 11:30	05/24/19 16:30	

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12287 MW-5**

**Lab Sample ID: 400-170707-1**

**Matrix: Water**

Date Collected: 05/20/19 11:33  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.133		0.0628	0.0639	1.00	0.0620	pCi/L	06/12/19 12:38	08/15/19 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					06/12/19 12:38	08/15/19 07:01	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.384	U	0.317	0.319	1.00	0.595	pCi/L	06/12/19 14:03	07/24/19 08:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					06/12/19 14:03	07/24/19 08:48	1
Y Carrier	90.5		40 - 110					06/12/19 14:03	07/24/19 08:48	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.251	U	0.323	0.325	5.00	0.595	pCi/L		08/20/19 08:43	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12288 MW-6**

**Lab Sample ID: 400-170707-2**

**Matrix: Water**

Date Collected: 05/20/19 12:46  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.195		0.0734	0.0755	1.00	0.0584	pCi/L	06/12/19 12:38	08/15/19 07:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					06/12/19 12:38	08/15/19 07:02	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.303	U	0.262	0.264	1.00	0.420	pCi/L	06/12/19 14:03	07/24/19 08:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					06/12/19 14:03	07/24/19 08:48	1
Y Carrier	85.6		40 - 110					06/12/19 14:03	07/24/19 08:48	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.498		0.272	0.275	5.00	0.420	pCi/L		08/20/19 08:43	1

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12289 MW-6 DUP**

**Lab Sample ID: 400-170707-3**

**Matrix: Water**

Date Collected: 05/20/19 12:46  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.232		0.0814	0.0840	1.00	0.0642	pCi/L	06/12/19 12:38	08/15/19 07:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		40 - 110					06/12/19 12:38	08/15/19 07:02	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.125	U	0.241	0.242	1.00	0.411	pCi/L	06/12/19 14:03	07/24/19 08:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		40 - 110					06/12/19 14:03	07/24/19 08:48	1
Y Carrier	89.3		40 - 110					06/12/19 14:03	07/24/19 08:48	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.357	U	0.254	0.256	5.00	0.411	pCi/L		08/20/19 08:43	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12290 FB-1**

**Lab Sample ID: 400-170707-4**

**Matrix: Water**

Date Collected: 05/20/19 13:25  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0895		0.0561	0.0566	1.00	0.0675	pCi/L	06/12/19 12:38	08/15/19 07:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.8		40 - 110					06/12/19 12:38	08/15/19 07:02	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.300	U	0.226	0.227	1.00	0.353	pCi/L	06/12/19 14:03	07/24/19 08:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.8		40 - 110					06/12/19 14:03	07/24/19 08:48	1
Y Carrier	92.3		40 - 110					06/12/19 14:03	07/24/19 08:48	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.389		0.233	0.234	5.00	0.353	pCi/L		08/20/19 08:43	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12291 MW-7**

**Lab Sample ID: 400-170707-5**

**Matrix: Water**

Date Collected: 05/20/19 14:06  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.178		0.0689	0.0707	1.00	0.0519	pCi/L	06/12/19 12:38	08/15/19 07:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		40 - 110					06/12/19 12:38	08/15/19 07:02	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.287	U	0.226	0.228	1.00	0.356	pCi/L	06/12/19 14:03	07/24/19 08:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.8		40 - 110					06/12/19 14:03	07/24/19 08:49	1
Y Carrier	86.0		40 - 110					06/12/19 14:03	07/24/19 08:49	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.465		0.236	0.239	5.00	0.356	pCi/L		08/20/19 08:43	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12292 MW-2**

**Lab Sample ID: 400-170707-6**

**Matrix: Water**

Date Collected: 05/20/19 15:56  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.147		0.0645	0.0659	1.00	0.0566	pCi/L	06/12/19 12:38	08/15/19 07:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					06/12/19 12:38	08/15/19 07:03	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.288	U	0.248	0.249	1.00	0.396	pCi/L	06/12/19 14:03	07/24/19 08:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					06/12/19 14:03	07/24/19 08:49	1
Y Carrier	85.2		40 - 110					06/12/19 14:03	07/24/19 08:49	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.435		0.256	0.258	5.00	0.396	pCi/L		08/20/19 08:43	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12293 MW-8**

**Lab Sample ID: 400-170707-7**

**Matrix: Water**

Date Collected: 05/21/19 08:24  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.128		0.0599	0.0610	1.00	0.0539	pCi/L	06/12/19 12:38	08/15/19 07:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/12/19 12:38	08/15/19 07:03	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0819	U	0.215	0.215	1.00	0.372	pCi/L	06/12/19 14:03	07/24/19 08:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/12/19 14:03	07/24/19 08:49	1
Y Carrier	85.6		40 - 110					06/12/19 14:03	07/24/19 08:49	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.210	U	0.223	0.223	5.00	0.372	pCi/L		08/20/19 08:43	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12294 MW-9**

**Lab Sample ID: 400-170707-8**

**Matrix: Water**

Date Collected: 05/21/19 09:36  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.121		0.0612	0.0621	1.00	0.0615	pCi/L	06/12/19 12:38	08/15/19 07:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					06/12/19 12:38	08/15/19 07:03	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.168	U	0.255	0.256	1.00	0.428	pCi/L	06/12/19 14:03	07/24/19 08:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					06/12/19 14:03	07/24/19 08:50	1
Y Carrier	83.7		40 - 110					06/12/19 14:03	07/24/19 08:50	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.289	U	0.262	0.263	5.00	0.428	pCi/L		08/20/19 08:43	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12295 MW-10**

**Lab Sample ID: 400-170707-9**

**Matrix: Water**

Date Collected: 05/21/19 10:16  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.104		0.0586	0.0594	1.00	0.0678	pCi/L	06/12/19 12:38	08/15/19 07:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		40 - 110					06/12/19 12:38	08/15/19 07:04	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	5.02	U G	6.43	6.45	1.00	10.7	pCi/L	08/20/19 15:38	08/28/19 15:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		40 - 110					08/20/19 15:38	08/28/19 15:25	1
Y Carrier	84.5		40 - 110					08/20/19 15:38	08/28/19 15:25	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	5.12	U G	6.43	6.45	5.00	10.7	pCi/L		08/30/19 08:33	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12296 MW-10 DUP**

**Lab Sample ID: 400-170707-10**

**Matrix: Water**

Date Collected: 05/21/19 10:16  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0730		0.0480	0.0485	1.00	0.0572	pCi/L	06/12/19 12:38	08/15/19 10:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					06/12/19 12:38	08/15/19 10:04	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-3.03	U G	5.09	5.10	1.00	9.75	pCi/L	08/20/19 15:38	08/28/19 15:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		40 - 110					08/20/19 15:38	08/28/19 15:25	1
Y Carrier	84.9		40 - 110					08/20/19 15:38	08/28/19 15:25	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-2.95	U G	5.09	5.10	5.00	9.75	pCi/L		08/30/19 08:33	1

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12297 FB-2**

**Lab Sample ID: 400-170707-11**

Matrix: Water

Date Collected: 05/21/19 10:50  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.00263	U	0.0497	0.0497	1.00	0.100	pCi/L	06/07/19 10:27	08/07/19 21:30	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	87.3		40 - 110					06/07/19 10:27	08/07/19 21:30	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.224	U	0.269	0.270	1.00	0.515	pCi/L	06/07/19 11:36	07/10/19 11:56	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	87.3		40 - 110					06/07/19 11:36	07/10/19 11:56	1
Y Carrier	82.2		40 - 110					06/07/19 11:36	07/10/19 11:56	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.221	U	0.274	0.275	5.00	0.515	pCi/L		08/12/19 08:06	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12298 MW-11**

**Lab Sample ID: 400-170707-12**

**Matrix: Water**

Date Collected: 05/21/19 11:33  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0275	U	0.0452	0.0452	1.00	0.104	pCi/L	06/07/19 10:27	08/07/19 21:31	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					06/07/19 10:27	08/07/19 21:31	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.127	U	0.250	0.251	1.00	0.426	pCi/L	06/07/19 11:36	07/10/19 11:58	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					06/07/19 11:36	07/10/19 11:58	1
Y Carrier	87.9		40 - 110					06/07/19 11:36	07/10/19 11:58	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0995	U	0.254	0.255	5.00	0.426	pCi/L		08/12/19 08:06	1

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12299 MW-12**

**Lab Sample ID: 400-170707-13**

**Matrix: Water**

Date Collected: 05/21/19 12:19  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0427	U	0.0624	0.0625	1.00	0.106	pCi/L	06/07/19 10:27	08/07/19 21:32	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.2		40 - 110					06/07/19 10:27	08/07/19 21:32	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.333	U	0.285	0.287	1.00	0.456	pCi/L	06/07/19 11:36	07/10/19 11:59	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.2		40 - 110					06/07/19 11:36	07/10/19 11:59	1
Y Carrier	83.7		40 - 110					06/07/19 11:36	07/10/19 11:59	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.376	U	0.292	0.294	5.00	0.456	pCi/L		08/12/19 08:06	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12300 MW-13**

**Lab Sample ID: 400-170707-14**

**Matrix: Water**

Date Collected: 05/21/19 12:58  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.166		0.0951	0.0962	1.00	0.133	pCi/L	06/12/19 14:18	08/14/19 17:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					06/12/19 14:18	08/14/19 17:27	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.337	U	0.434	0.435	1.00	0.720	pCi/L	06/13/19 11:01	07/22/19 12:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					06/13/19 11:01	07/22/19 12:38	1
Y Carrier	62.4		40 - 110					06/13/19 11:01	07/22/19 12:38	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.503	U	0.444	0.446	5.00	0.720	pCi/L		08/15/19 08:21	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12301 MW-1**

**Lab Sample ID: 400-170707-15**

**Matrix: Water**

Date Collected: 05/21/19 13:44  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.593		0.130	0.140	1.00	0.104	pCi/L	06/12/19 14:18	08/14/19 17:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/12/19 14:18	08/14/19 17:28	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.787		0.333	0.341	1.00	0.479	pCi/L	06/13/19 11:01	07/22/19 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/13/19 11:01	07/22/19 12:39	1
Y Carrier	72.9		40 - 110					06/13/19 11:01	07/22/19 12:39	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.38		0.357	0.369	5.00	0.479	pCi/L	08/15/19 08:21		1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12302 MW-15**

**Lab Sample ID: 400-170707-16**

**Matrix: Water**

Date Collected: 05/22/19 09:07  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.00247	U	0.0389	0.0389	1.00	0.0838	pCi/L	06/12/19 14:18	08/14/19 17:28	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	95.1		40 - 110					06/12/19 14:18	08/14/19 17:28	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.590		0.334	0.339	1.00	0.508	pCi/L	06/13/19 11:01	07/22/19 12:39	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	95.1		40 - 110					06/13/19 11:01	07/22/19 12:39	1
Y Carrier	77.0		40 - 110					06/13/19 11:01	07/22/19 12:39	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.588		0.336	0.341	5.00	0.508	pCi/L		08/15/19 08:21	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12303 MW-3**

**Lab Sample ID: 400-170707-17**

**Matrix: Water**

Date Collected: 05/22/19 10:22  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.169		0.0897	0.0910	1.00	0.108	pCi/L	06/12/19 14:18	08/14/19 17:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		40 - 110					06/12/19 14:18	08/14/19 17:28	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.474	U	0.407	0.409	1.00	0.650	pCi/L	06/13/19 11:01	07/22/19 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		40 - 110					06/13/19 11:01	07/22/19 12:39	1
Y Carrier	71.0		40 - 110					06/13/19 11:01	07/22/19 12:39	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.643	U	0.417	0.419	5.00	0.650	pCi/L		08/15/19 08:21	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12304 MW-14S**

**Lab Sample ID: 400-170707-18**

**Matrix: Water**

Date Collected: 05/22/19 11:19  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.114		0.0742	0.0749	1.00	0.103	pCi/L	06/12/19 14:18	08/14/19 17:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					06/12/19 14:18	08/14/19 17:28	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.126	U	0.285	0.286	1.00	0.490	pCi/L	06/13/19 11:01	07/22/19 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					06/13/19 11:01	07/22/19 12:39	1
Y Carrier	75.5		40 - 110					06/13/19 11:01	07/22/19 12:39	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.240	U	0.295	0.296	5.00	0.490	pCi/L		08/15/19 08:21	1

# Client Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12305 EB-1**

**Lab Sample ID: 400-170707-19**

**Matrix: Water**

Date Collected: 05/22/19 11:30  
 Date Received: 05/24/19 16:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0771	U	0.0456	0.0461	1.00	0.125	pCi/L	06/12/19 14:18	08/14/19 17:28	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	87.8		40 - 110					06/12/19 14:18	08/14/19 17:28	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.0992	U	0.279	0.279	1.00	0.519	pCi/L	06/13/19 11:01	07/22/19 12:39	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	87.8		40 - 110					06/13/19 11:01	07/22/19 12:39	1
Y Carrier	73.3		40 - 110					06/13/19 11:01	07/22/19 12:39	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.176	U	0.283	0.283	5.00	0.519	pCi/L		08/15/19 08:21	1

# Definitions/Glossary

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

Job ID: 400-170707-1  
SDG: Gaston Gypsum 1225

## Qualifiers

Rad Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Listed under the "D" column to designate that the result is reported on a dry weight basis
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Lab Chronicle

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12287 MW-5**

Date Collected: 05/20/19 11:33

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:01	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431494	06/12/19 14:03	ORM	TAL SL
Total/NA	Analysis	9320		1	436168	07/24/19 08:48	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440033	08/20/19 08:43	SMP	TAL SL

**Client Sample ID: AZ12288 MW-6**

Date Collected: 05/20/19 12:46

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:02	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431494	06/12/19 14:03	ORM	TAL SL
Total/NA	Analysis	9320		1	436168	07/24/19 08:48	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440033	08/20/19 08:43	SMP	TAL SL

**Client Sample ID: AZ12289 MW-6 DUP**

Date Collected: 05/20/19 12:46

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:02	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431494	06/12/19 14:03	ORM	TAL SL
Total/NA	Analysis	9320		1	436168	07/24/19 08:48	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440033	08/20/19 08:43	SMP	TAL SL

**Client Sample ID: AZ12290 FB-1**

Date Collected: 05/20/19 13:25

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:02	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431494	06/12/19 14:03	ORM	TAL SL
Total/NA	Analysis	9320		1	436168	07/24/19 08:48	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440033	08/20/19 08:43	SMP	TAL SL

Eurofins TestAmerica, Pensacola

# Lab Chronicle

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12291 MW-7**

Date Collected: 05/20/19 14:06

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:02	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431494	06/12/19 14:03	ORM	TAL SL
Total/NA	Analysis	9320		1	436168	07/24/19 08:49	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440033	08/20/19 08:43	SMP	TAL SL

**Client Sample ID: AZ12292 MW-2**

Date Collected: 05/20/19 15:56

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:03	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431494	06/12/19 14:03	ORM	TAL SL
Total/NA	Analysis	9320		1	436168	07/24/19 08:49	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440033	08/20/19 08:43	SMP	TAL SL

**Client Sample ID: AZ12293 MW-8**

Date Collected: 05/21/19 08:24

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:03	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431494	06/12/19 14:03	ORM	TAL SL
Total/NA	Analysis	9320		1	436168	07/24/19 08:49	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440033	08/20/19 08:43	SMP	TAL SL

**Client Sample ID: AZ12294 MW-9**

Date Collected: 05/21/19 09:36

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:03	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431494	06/12/19 14:03	ORM	TAL SL
Total/NA	Analysis	9320		1	436188	07/24/19 08:50	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	440033	08/20/19 08:43	SMP	TAL SL

Eurofins TestAmerica, Pensacola

# Lab Chronicle

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12295 MW-10**

Date Collected: 05/21/19 10:16

Date Received: 05/24/19 16:30

**Lab Sample ID: 400-170707-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 07:04	CDR	TAL SL
Total/NA	Prep	PrecSep_0			440084	08/20/19 15:38	ORM	TAL SL
Total/NA	Analysis	9320		1	441043	08/28/19 15:25	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	441472	08/30/19 08:33	SMP	TAL SL

**Client Sample ID: AZ12296 MW-10 DUP**

**Lab Sample ID: 400-170707-10**

Matrix: Water

Date Collected: 05/21/19 10:16

Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431481	06/12/19 12:38	ORM	TAL SL
Total/NA	Analysis	9315		1	439665	08/15/19 10:04	CDR	TAL SL
Total/NA	Prep	PrecSep_0			440084	08/20/19 15:38	ORM	TAL SL
Total/NA	Analysis	9320		1	441043	08/28/19 15:25	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	441472	08/30/19 08:33	SMP	TAL SL

**Client Sample ID: AZ12297 FB-2**

**Lab Sample ID: 400-170707-11**

Matrix: Water

Date Collected: 05/21/19 10:50

Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431147	06/07/19 10:27	ORM	TAL SL
Total/NA	Analysis	9315		1	438686	08/07/19 21:30	CDR	TAL SL
Total/NA	Prep	PrecSep_0			431164	06/07/19 11:36	ORM	TAL SL
Total/NA	Analysis	9320		1	434465	07/10/19 11:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439157	08/12/19 08:06	SMP	TAL SL

**Client Sample ID: AZ12298 MW-11**

**Lab Sample ID: 400-170707-12**

Matrix: Water

Date Collected: 05/21/19 11:33

Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431147	06/07/19 10:27	ORM	TAL SL
Total/NA	Analysis	9315		1	438687	08/07/19 21:31	KLS	TAL SL
Total/NA	Prep	PrecSep_0			431164	06/07/19 11:36	ORM	TAL SL
Total/NA	Analysis	9320		1	434371	07/10/19 11:58	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439157	08/12/19 08:06	SMP	TAL SL

Eurofins TestAmerica, Pensacola

## Lab Chronicle

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12299 MW-12**

**Lab Sample ID: 400-170707-13**

**Matrix: Water**

Date Collected: 05/21/19 12:19  
 Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431147	06/07/19 10:27	ORM	TAL SL
Total/NA	Analysis	9315		1	438688	08/07/19 21:32	KLS	TAL SL
Total/NA	Prep	PrecSep_0			431164	06/07/19 11:36	ORM	TAL SL
Total/NA	Analysis	9320		1	434371	07/10/19 11:59	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439157	08/12/19 08:06	SMP	TAL SL

**Client Sample ID: AZ12300 MW-13**

**Lab Sample ID: 400-170707-14**

**Matrix: Water**

Date Collected: 05/21/19 12:58  
 Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431495	06/12/19 14:18	ORM	TAL SL
Total/NA	Analysis	9315		1	439521	08/14/19 17:27	KLS	TAL SL
Total/NA	Prep	PrecSep_0			431600	06/13/19 11:01	ORM	TAL SL
Total/NA	Analysis	9320		1	435771	07/22/19 12:38	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439602	08/15/19 08:21	SMP	TAL SL

**Client Sample ID: AZ12301 MW-14**

**Lab Sample ID: 400-170707-15**

**Matrix: Water**

Date Collected: 05/21/19 13:44  
 Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431495	06/12/19 14:18	ORM	TAL SL
Total/NA	Analysis	9315		1	439521	08/14/19 17:28	KLS	TAL SL
Total/NA	Prep	PrecSep_0			431600	06/13/19 11:01	ORM	TAL SL
Total/NA	Analysis	9320		1	435771	07/22/19 12:39	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439602	08/15/19 08:21	SMP	TAL SL

**Client Sample ID: AZ12302 MW-15**

**Lab Sample ID: 400-170707-16**

**Matrix: Water**

Date Collected: 05/22/19 09:07  
 Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431495	06/12/19 14:18	ORM	TAL SL
Total/NA	Analysis	9315		1	439521	08/14/19 17:28	KLS	TAL SL
Total/NA	Prep	PrecSep_0			431600	06/13/19 11:01	ORM	TAL SL
Total/NA	Analysis	9320		1	435771	07/22/19 12:39	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439602	08/15/19 08:21	SMP	TAL SL

Eurofins TestAmerica, Pensacola

## Lab Chronicle

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

**Client Sample ID: AZ12303 MW-3**

**Lab Sample ID: 400-170707-17**

**Matrix: Water**

Date Collected: 05/22/19 10:22  
 Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431495	06/12/19 14:18	ORM	TAL SL
Total/NA	Analysis	9315		1	439521	08/14/19 17:28	KLS	TAL SL
Total/NA	Prep	PrecSep_0			431600	06/13/19 11:01	ORM	TAL SL
Total/NA	Analysis	9320		1	435771	07/22/19 12:39	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439602	08/15/19 08:21	SMP	TAL SL

**Client Sample ID: AZ12304 MW-14S**

**Lab Sample ID: 400-170707-18**

**Matrix: Water**

Date Collected: 05/22/19 11:19  
 Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431495	06/12/19 14:18	ORM	TAL SL
Total/NA	Analysis	9315		1	439521	08/14/19 17:28	KLS	TAL SL
Total/NA	Prep	PrecSep_0			431600	06/13/19 11:01	ORM	TAL SL
Total/NA	Analysis	9320		1	435771	07/22/19 12:39	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439602	08/15/19 08:21	SMP	TAL SL

**Client Sample ID: AZ12305 EB-1**

**Lab Sample ID: 400-170707-19**

**Matrix: Water**

Date Collected: 05/22/19 11:30  
 Date Received: 05/24/19 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			431495	06/12/19 14:18	ORM	TAL SL
Total/NA	Analysis	9315		1	439521	08/14/19 17:28	KLS	TAL SL
Total/NA	Prep	PrecSep_0			431600	06/13/19 11:01	ORM	TAL SL
Total/NA	Analysis	9320		1	435771	07/22/19 12:39	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	439602	08/15/19 08:21	SMP	TAL SL

**Laboratory References:**

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

# QC Association Summary

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

## Rad

### Prep Batch: 431147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-170707-11	AZ12297 FB-2	Total/NA	Water	PrecSep-21	
400-170707-12	AZ12298 MW-11	Total/NA	Water	PrecSep-21	
400-170707-13	AZ12299 MW-12	Total/NA	Water	PrecSep-21	
MB 160-431147/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-431147/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-431147/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

### Prep Batch: 431164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-170707-11	AZ12297 FB-2	Total/NA	Water	PrecSep_0	
400-170707-12	AZ12298 MW-11	Total/NA	Water	PrecSep_0	
400-170707-13	AZ12299 MW-12	Total/NA	Water	PrecSep_0	
MB 160-431164/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-431164/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-431164/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

### Prep Batch: 431481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-170707-1	AZ12287 MW-5	Total/NA	Water	PrecSep-21	
400-170707-2	AZ12288 MW-6	Total/NA	Water	PrecSep-21	
400-170707-3	AZ12289 MW-6 DUP	Total/NA	Water	PrecSep-21	
400-170707-4	AZ12290 FB-1	Total/NA	Water	PrecSep-21	
400-170707-5	AZ12291 MW-7	Total/NA	Water	PrecSep-21	
400-170707-6	AZ12292 MW-2	Total/NA	Water	PrecSep-21	
400-170707-7	AZ12293 MW-8	Total/NA	Water	PrecSep-21	
400-170707-8	AZ12294 MW-9	Total/NA	Water	PrecSep-21	
400-170707-9	AZ12295 MW-10	Total/NA	Water	PrecSep-21	
400-170707-10	AZ12296 MW-10 DUP	Total/NA	Water	PrecSep-21	
MB 160-431481/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-431481/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-170707-7 DU	AZ12293 MW-8	Total/NA	Water	PrecSep-21	

### Prep Batch: 431494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-170707-1	AZ12287 MW-5	Total/NA	Water	PrecSep_0	
400-170707-2	AZ12288 MW-6	Total/NA	Water	PrecSep_0	
400-170707-3	AZ12289 MW-6 DUP	Total/NA	Water	PrecSep_0	
400-170707-4	AZ12290 FB-1	Total/NA	Water	PrecSep_0	
400-170707-5	AZ12291 MW-7	Total/NA	Water	PrecSep_0	
400-170707-6	AZ12292 MW-2	Total/NA	Water	PrecSep_0	
400-170707-7	AZ12293 MW-8	Total/NA	Water	PrecSep_0	
400-170707-8	AZ12294 MW-9	Total/NA	Water	PrecSep_0	
LCS 160-431494/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-170707-7 DU	AZ12293 MW-8	Total/NA	Water	PrecSep_0	

### Prep Batch: 431495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-170707-14	AZ12300 MW-13	Total/NA	Water	PrecSep-21	
400-170707-15	AZ12301 MW-1	Total/NA	Water	PrecSep-21	
400-170707-16	AZ12302 MW-15	Total/NA	Water	PrecSep-21	
400-170707-17	AZ12303 MW-3	Total/NA	Water	PrecSep-21	

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# QC Association Summary

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

## **Rad (Continued)**

### **Prep Batch: 431495 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-170707-18	AZ12304 MW-14S	Total/NA	Water	PrecSep-21	
400-170707-19	AZ12305 EB-1	Total/NA	Water	PrecSep-21	
MB 160-431495/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-431495/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-170707-18 DU	AZ12304 MW-14S	Total/NA	Water	PrecSep-21	

### **Prep Batch: 431600**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-170707-14	AZ12300 MW-13	Total/NA	Water	PrecSep_0	
400-170707-15	AZ12301 MW-1	Total/NA	Water	PrecSep_0	
400-170707-16	AZ12302 MW-15	Total/NA	Water	PrecSep_0	
400-170707-17	AZ12303 MW-3	Total/NA	Water	PrecSep_0	
400-170707-18	AZ12304 MW-14S	Total/NA	Water	PrecSep_0	
400-170707-19	AZ12305 EB-1	Total/NA	Water	PrecSep_0	
MB 160-431600/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-431600/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-170707-18 DU	AZ12304 MW-14S	Total/NA	Water	PrecSep_0	

### **Prep Batch: 440084**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-170707-9	AZ12295 MW-10	Total/NA	Water	PrecSep_0	
400-170707-10	AZ12296 MW-10 DUP	Total/NA	Water	PrecSep_0	
MB 160-440084/5-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-440084/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-440084/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

# QC Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

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

**Lab Sample ID:** MB 160-431147/23-A

**Matrix:** Water

**Analysis Batch:** 438879

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 431147

Analyte	Result	MB MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01897	U	0.0558	0.0559	1.00	0.103	pCi/L	06/07/19 10:27	08/08/19 11:37	1
<i>Carrier</i>		<i>MB MB Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	92.7		40 - 110					06/07/19 10:27	08/08/19 11:37	1

**Lab Sample ID:** LCS 160-431147/1-A

**Matrix:** Water

**Analysis Batch:** 438686

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 431147

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER
				Uncert. (2σ+/-)						
Radium-226	11.4	9.870		1.01	1.00	0.0948	pCi/L	87	75 - 125	
<i>Carrier</i>	<i>LCS %Yield</i>	<i>LCS Qualifier</i>	<i>Limits</i>							
Ba Carrier	104		40 - 110							

**Lab Sample ID:** LCSD 160-431147/2-A

**Matrix:** Water

**Analysis Batch:** 438686

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 431147

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER
				Uncert. (2σ+/-)						
Radium-226	11.4	11.00		1.13	1.00	0.113	pCi/L	97	75 - 125	0.53
<i>Carrier</i>	<i>LCSD %Yield</i>	<i>LCSD Qualifier</i>	<i>Limits</i>							
Ba Carrier	89.3		40 - 110							

**Lab Sample ID:** MB 160-431481/23-A

**Matrix:** Water

**Analysis Batch:** 439665

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 431481

Analyte	Result	MB MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.08730		0.0574	0.0579	1.00	0.0698	pCi/L	06/12/19 12:38	08/15/19 10:02	1
<i>Carrier</i>	<i>MB %Yield</i>	<i>MB Qualifier</i>	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	79.7		40 - 110					06/12/19 12:38	08/15/19 10:02	1

**Lab Sample ID:** LCS 160-431481/1-A

**Matrix:** Water

**Analysis Batch:** 439719

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 431481

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER
				Uncert. (2σ+/-)						
Radium-226	11.4	8.489		0.883	1.00	0.0829	pCi/L	75	75 - 125	

Eurofins TestAmerica, Pensacola

# QC Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

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

**Lab Sample ID: LCS 160-431481/1-A**

**Matrix: Water**

**Analysis Batch: 439719**

Carrier	LCS	LCS	Limits
	%Yield	Qualifier	
Ba Carrier	105		40 - 110

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 431481**

**Lab Sample ID: 400-170707-7 DU**

**Matrix: Water**

**Analysis Batch: 439665**

Analyte	Sample	Sample	DU	DU	Total	RER	Limit	
	Result	Qual			Uncert. (2σ+/-)			
Radium-226	0.128		0.1651		0.0706	1.00	0.0579	pCi/L
<b>Carrier</b>		<b>DU</b>	<b>DU</b>					
Ba Carrier	92.4			40 - 110			0.28	1

**Lab Sample ID: MB 160-431495/23-A**

**Matrix: Water**

**Analysis Batch: 439521**

Analyte	MB	MB	Count Uncert. (2σ+/-)	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier		Uncert. (2σ+/-)						
Radium-226	0.009378	U	0.0712	0.0713	1.00	0.137	pCi/L	06/12/19 14:18	08/14/19 19:28	1
<b>Carrier</b>		<b>MB</b>	<b>MB</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	76.5			40 - 110				06/12/19 14:18	08/14/19 19:28	1

**Lab Sample ID: LCS 160-431495/1-A**

**Matrix: Water**

**Analysis Batch: 439521**

Analyte	Spike	LCS	LCS	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec.	Limits
	Added	Result	Qual						
Radium-226	11.4	9.356		0.966	1.00	0.0860	pCi/L	82	75 - 125
<b>Carrier</b>		<b>LCS</b>	<b>LCS</b>						
Ba Carrier	99.9			40 - 110					

**Lab Sample ID: 400-170707-18 DU**

**Matrix: Water**

**Analysis Batch: 439521**

Analyte	Sample	Sample	DU	DU	Total	RER	Limit	
	Result	Qual			Uncert. (2σ+/-)			
Radium-226	0.114		0.06929	U	0.0670	1.00	0.104	pCi/L
<b>Carrier</b>		<b>DU</b>	<b>DU</b>					
Ba Carrier	87.8			40 - 110			0.32	1

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 431495**

# QC Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

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

**Lab Sample ID:** MB 160-431164/23-A

**Matrix:** Water

**Analysis Batch:** 434371

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 431164

Analyte	Result	MB U	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.02471	U		0.253	0.253	1.00	0.457	pCi/L	06/07/19 11:36	07/10/19 11:59	1
<b>Carrier</b>											
<i>Ba Carrier</i> 92.7      40 - 110      06/07/19 11:36      07/10/19 11:59      1											
<i>Y Carrier</i> 81.9      40 - 110      06/07/19 11:36      07/10/19 11:59      1											

**Lab Sample ID:** LCS 160-431164/1-A

**Matrix:** Water

**Analysis Batch:** 434381

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 431164

Analyte	Spike Added	LCS Result	LCS Qual	Count	Total	RL	MDC	Unit	%Rec	Limits	%Rec.
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-228	9.04	8.830		1.05	1.00	1.00	0.412	pCi/L	98	75 - 125	
<b>Carrier</b>											
<i>Ba Carrier</i> 104      40 - 110      06/07/19 11:36      07/10/19 11:59      1											
<i>Y Carrier</i> 76.6      40 - 110											

**Lab Sample ID:** LCSD 160-431164/2-A

**Matrix:** Water

**Analysis Batch:** 434381

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 431164

Analyte	Spike Added	LCSD Result	LCSD Qual	Count	Total	RL	MDC	Unit	%Rec	Limits	%Rec.
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-228	9.04	8.320		1.05	1.00	1.00	0.562	pCi/L	92	75 - 125	0.24
<b>Carrier</b>											
<i>Ba Carrier</i> 89.3      40 - 110      06/07/19 11:36      07/10/19 11:59      1											
<i>Y Carrier</i> 78.5      40 - 110											

**Lab Sample ID:** LCS 160-431494/1-A

**Matrix:** Water

**Analysis Batch:** 436168

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 431494

Analyte	Spike Added	LCS Result	LCS Qual	Count	Total	RL	MDC	Unit	%Rec	Limits	%Rec.
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-228	9.00	8.720		1.00	1.00	1.00	0.337	pCi/L	97	75 - 125	
<b>Carrier</b>											
<i>Ba Carrier</i> 105      40 - 110      06/07/19 11:36      07/10/19 11:59      1											
<i>Y Carrier</i> 87.9      40 - 110											

Eurofins TestAmerica, Pensacola

# QC Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

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

**Lab Sample ID:** 400-170707-7 DU

**Matrix:** Water

**Analysis Batch:** 436168

**Client Sample ID:** AZ12293 MW-8

**Prep Type:** Total/NA

**Prep Batch:** 431494

Analyte	Sample	Sample	DU		DU		Total		RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	(2σ+/-)	(2σ+/-)	(2σ+/-)	(2σ+/-)					
Radium-228	0.0819	U	-0.00627	U	0.200	4	1.00	0.361	pCi/L	0.21	1		

Carrier	DU	DU	Limits
	%Yield	Qualifier	
Ba Carrier	92.4		40 - 110
Y Carrier	90.5		40 - 110

**Lab Sample ID:** MB 160-431600/23-A

**Matrix:** Water

**Analysis Batch:** 435773

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 431600

Analyte	MB	MB	Count		Total		RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert.	(2σ+/-)	Uncert.	(2σ+/-)						
Radium-228	0.2901	U	0.374		0.375		1.00	0.622	pCi/L	06/13/19 11:01	07/22/19 12:54	1
Carrier	MB	MB	Uncert.	(2σ+/-)	Uncert.	(2σ+/-)				Prepared	Analyzed	Dil Fac
Ba Carrier	76.5		40 - 110							06/13/19 11:01	07/22/19 12:54	1
Y Carrier	68.0		40 - 110							06/13/19 11:01	07/22/19 12:54	1

**Lab Sample ID:** LCS 160-431600/1-A

**Matrix:** Water

**Analysis Batch:** 435771

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 431600

Analyte	Spike	LCS	LCS	Total		RL	MDC	Unit	%Rec	Limits	%Rec
	Added	Result	Qual	Uncert.	(2σ+/-)						
Radium-228	9.00	10.88		1.33		1.00	0.594	pCi/L	121	75 - 125	
Carrier	LCS	LCS	Uncert.	(2σ+/-)							
Ba Carrier	%Yield	Qualifier	Limits								
Ba Carrier	99.9		40 - 110								
Y Carrier	59.8		40 - 110								

**Lab Sample ID:** 400-170707-18 DU

**Matrix:** Water

**Analysis Batch:** 435771

**Client Sample ID:** AZ12304 MW-14S

**Prep Type:** Total/NA

**Prep Batch:** 431600

Analyte	Sample	Sample	DU		DU		Total		RL	MDC	Unit	RER
	Result	Qual	Result	Qual	Uncert.	(2σ+/-)	RL	MDC	Unit			
Radium-228	0.126	U	0.1454	U	0.295		1.00	0.505	pCi/L			0.03
Carrier	DU	DU	Uncert.	(2σ+/-)								
Ba Carrier	%Yield	Qualifier	Limits									
Ba Carrier	87.8		40 - 110									
Y Carrier	71.4		40 - 110									

Eurofins TestAmerica, Pensacola

# QC Sample Results

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

Job ID: 400-170707-1  
 SDG: Gaston Gypsum 1225

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

**Lab Sample ID:** MB 160-440084/5-A

**Matrix:** Water

**Analysis Batch:** 441043

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 440084

Analyte	Result	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-4.840	U G	4.29	4.32	1.00	8.65	pCi/L	08/20/19 15:38	08/28/19 15:25	1
<b>Carrier</b>										
Ba Carrier	87.0	MB Qualifier	<b>Limits</b>		Prepared	Analyzed	Dil Fac	08/20/19 15:38	08/28/19 15:25	1
			40 - 110							
Y Carrier	92.7	MB Qualifier	<b>Limits</b>		08/20/19 15:38	08/28/19 15:25	1	08/20/19 15:38	08/28/19 15:25	1
			40 - 110							

**Lab Sample ID:** LCS 160-440084/1-A

**Matrix:** Water

**Analysis Batch:** 441043

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 440084

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	Limits	%Rec.
				Uncert. (2σ+/-)						
Radium-228	193	214.8		25.9	1.00	10.9	pCi/L	111	75 - 125	
<b>Carrier</b>										
Ba Carrier	84.2	MB Qualifier	<b>Limits</b>		Prepared	Analyzed	Dil Fac	08/20/19 15:38	08/28/19 15:25	1
			40 - 110							
Y Carrier	85.2	MB Qualifier	<b>Limits</b>		08/20/19 15:38	08/28/19 15:25	1	08/20/19 15:38	08/28/19 15:25	1
			40 - 110							

**Lab Sample ID:** LCSD 160-440084/2-A

**Matrix:** Water

**Analysis Batch:** 441043

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 440084

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	Limits	%Rec.	RER	Limit
				Uncert. (2σ+/-)								
Radium-228	193	213.5		25.9	1.00	11.7	pCi/L	111	75 - 125	0.02	1	
<b>Carrier</b>												
Ba Carrier	84.2	MB Qualifier	<b>Limits</b>		Prepared	Analyzed	Dil Fac	08/20/19 15:38	08/28/19 15:25	1	08/20/19 15:38	08/28/19 15:25
			40 - 110									
Y Carrier	84.5	MB Qualifier	<b>Limits</b>		08/20/19 15:38	08/28/19 15:25	1	08/20/19 15:38	08/28/19 15:25	1	08/20/19 15:38	08/28/19 15:25
			40 - 110									

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

**Lab Sample ID:** 400-170707-18 DU

**Matrix:** Water

**Analysis Batch:** 439602

**Client Sample ID:** AZ12304 MW-14S

**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total	RL	MDC	Unit	RER	Limit
					Uncert. (2σ+/-)					
Combined Radium 226 + 228	0.240	U	0.2147	U	0.303	5.00	0.505	pCi/L	0.04	

Eurofins TestAmerica, Pensacola

# QC Sample Results

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

Job ID: 400-170707-1  
SDG: Gaston Gypsum 1225

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

Lab Sample ID: 400-170707-7 DU

Client Sample ID: AZ12293 MW-8

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 440033

Analyte	Sample	Sample	DU		DU		Total		RER	RER	Limit
	Result	Qual	Result	Qual	(2 $\sigma$ +/-)	RL	MDC	Unit			
Combined Radium 226 + 228	0.210	U	0.1589	U	0.212	5.00	0.361	pCi/L	0.12	0.12	



## Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-170707-1  
SDG Number: Gaston Gypsum 1225

**Login Number:** 170707

**List Source:** Eurofins TestAmerica, Pensacola

**List Number:** 1

**Creator:** Whitley, Adrian

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	18.5°C, 17.9°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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

## Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-170707-1  
SDG Number: Gaston Gypsum 1225

**Login Number:** 170707

**List Source:** Eurofins TestAmerica, St. Louis  
**List Creation:** 05/29/19 12:21 PM

**List Number:** 2

**Creator:** Hellm, Michael

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	19.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Accreditation/Certification Summary

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

Job ID: 400-170707-1

SDG: Gaston Gypsum 1225

## 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
Alabama	State Program	40150	06-30-20
ANAB	ISO/IEC 17025	L2471	02-22-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arizona	State Program	AZ0710	01-12-20
Arkansas DEQ	State Program	88-0689	09-01-19
California	State Program	2510	06-30-20
Florida	NELAP	E81010	06-30-20
Florida	NELAP	E81010	06-30-20
Georgia	State Program	E81010 (FL)	06-30-20
Illinois	NELAP	200041	10-09-19
Illinois	NELAP	004586	10-09-19
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	10-31-19
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State Program	98030	12-31-19
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Maryland	State Program	233	09-30-20
Massachusetts	State Program	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Michigan	State Program	9912	05-06-20
New Jersey	NELAP	FL006	06-30-20
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-19
Oklahoma	State Program	9810	08-31-19
Pennsylvania	NELAP	68-00467	01-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State Program	96026	06-30-19 *
Tennessee	State	TN02907	06-30-20
Tennessee	State Program	TN02907	06-30-20
Texas	NELAP	T104704286-18-15	09-30-19
Texas	NELAP	T104704286	09-30-19
US Fish & Wildlife	Federal	LE058448-0	07-31-20
USDA	Federal	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
Washington	State Program	C915	05-15-20
West Virginia DEP	State Program	136	07-31-19 *

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

Eurofins TestAmerica, Pensacola

# Accreditation/Certification Summary

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

Job ID: 400-170707-1

SDG: Gaston Gypsum 1225

## 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	DoD	L2305	04-06-22
ANAB	DOE	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-19
Arizona	State Program	AZ0813	12-08-19
California	State	2886	06-30-20
California	State Program	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Connecticut	State Program	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
Florida	NELAP	E87689	06-30-20
Hawaii	State Program	NA	06-30-20
Illinois	NELAP	200023	11-30-19
Illinois	NELAP	004553	11-30-19
Iowa	State Program	373	12-01-20
Kansas	NELAP	E-10236	10-31-19
Kentucky (DW)	State	KY90125	12-31-19
Kentucky (DW)	State Program	KY90125	12-31-19
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	NELAP	LA011	12-31-19
Louisiana (DW)	State	LA011	12-31-19
Maryland	State	310	09-30-20
Maryland	State Program	310	09-30-20
Michigan	State Program	9005	06-30-20
Missouri	State	780	06-30-22
Missouri	State Program	780	06-30-20
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	03-31-20
New York	NELAP	11616	04-01-20
North Dakota	State	R-207	06-30-20
North Dakota	State Program	R207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-19
Oklahoma	State Program	9997	08-31-19 *
Pennsylvania	NELAP	68-00540	02-28-20
Pennsylvania	NELAP	68-00540	02-28-20
South Carolina	State Program	85002001	06-30-20
Texas	NELAP	T104704193-19-14	07-31-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	Federal	058448	07-31-20
USDA	Federal	P330-17-0028	02-02-20
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	460230	06-14-20
Virginia	NELAP	10310	06-14-20
Washington	State Program	C592	08-30-19
West Virginia DEP	State Program	381	08-31-19 *

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

Eurofins TestAmerica, Pensacola

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-1	5/21/2019 13:22	Conductivity	415.6	uS/cm
GN-GSA-MW-1	5/21/2019 13:22	Depth to Water Detail	29.97	ft
GN-GSA-MW-1	5/21/2019 13:22	DO	0.18	mg/L
GN-GSA-MW-1	5/21/2019 13:22	Oxidation Reduction Potention	-121.5	mv
GN-GSA-MW-1	5/21/2019 13:22	pH	7.44	pH
GN-GSA-MW-1	5/21/2019 13:22	Temperature	21.75	C
GN-GSA-MW-1	5/21/2019 13:22	Turbidity	1.19	NTU
GN-GSA-MW-1	5/21/2019 13:27	Conductivity	411.6	uS/cm
GN-GSA-MW-1	5/21/2019 13:27	Depth to Water Detail	30.29	ft
GN-GSA-MW-1	5/21/2019 13:27	DO	0.13	mg/L
GN-GSA-MW-1	5/21/2019 13:27	Oxidation Reduction Potention	-134.3	mv
GN-GSA-MW-1	5/21/2019 13:27	pH	7.47	pH
GN-GSA-MW-1	5/21/2019 13:27	Temperature	21.71	C
GN-GSA-MW-1	5/21/2019 13:27	Turbidity	1.12	NTU
GN-GSA-MW-1	5/21/2019 13:32	Conductivity	396.8	uS/cm
GN-GSA-MW-1	5/21/2019 13:32	Depth to Water Detail	30.49	ft
GN-GSA-MW-1	5/21/2019 13:32	DO	0.11	mg/L
GN-GSA-MW-1	5/21/2019 13:32	Oxidation Reduction Potention	-142.1	mv
GN-GSA-MW-1	5/21/2019 13:32	pH	7.5	pH
GN-GSA-MW-1	5/21/2019 13:32	Temperature	21.58	C
GN-GSA-MW-1	5/21/2019 13:32	Turbidity	1.07	NTU
GN-GSA-MW-1	5/21/2019 13:37	Conductivity	401	uS/cm
GN-GSA-MW-1	5/21/2019 13:37	Depth to Water Detail	30.61	ft
GN-GSA-MW-1	5/21/2019 13:37	DO	0.1	mg/L
GN-GSA-MW-1	5/21/2019 13:37	Oxidation Reduction Potention	-143.5	mv
GN-GSA-MW-1	5/21/2019 13:37	pH	7.5	pH
GN-GSA-MW-1	5/21/2019 13:37	Temperature	21.62	C
GN-GSA-MW-1	5/21/2019 13:37	Turbidity	1.24	NTU
GN-GSA-MW-1	5/21/2019 13:42	Conductivity	406.6	uS/cm
GN-GSA-MW-1	5/21/2019 13:42	Depth to Water Detail	30.74	ft
GN-GSA-MW-1	5/21/2019 13:42	DO	0.09	mg/L
GN-GSA-MW-1	5/21/2019 13:42	Oxidation Reduction Potention	-138.6	mv
GN-GSA-MW-1	5/21/2019 13:42	pH	7.5	pH
GN-GSA-MW-1	5/21/2019 13:42	Temperature	21.37	C
GN-GSA-MW-1	5/21/2019 13:42	Turbidity	0.96	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-10	5/21/2019 9:59	Conductivity	449.3	uS/cm
GN-GSA-MW-10	5/21/2019 9:59	Depth to Water Detail	22.16	ft
GN-GSA-MW-10	5/21/2019 9:59	DO	0.8	mg/L
GN-GSA-MW-10	5/21/2019 9:59	Oxidation Reduction Potention	180.9	mv
GN-GSA-MW-10	5/21/2019 9:59	pH	7.03	pH
GN-GSA-MW-10	5/21/2019 9:59	Temperature	21.8	C
GN-GSA-MW-10	5/21/2019 9:59	Turbidity	1.27	NTU
GN-GSA-MW-10	5/21/2019 10:04	Conductivity	450.1	uS/cm
GN-GSA-MW-10	5/21/2019 10:04	Depth to Water Detail	22.19	ft
GN-GSA-MW-10	5/21/2019 10:04	DO	0.38	mg/L
GN-GSA-MW-10	5/21/2019 10:04	Oxidation Reduction Potention	181.5	mv
GN-GSA-MW-10	5/21/2019 10:04	pH	6.99	pH
GN-GSA-MW-10	5/21/2019 10:04	Temperature	21.66	C
GN-GSA-MW-10	5/21/2019 10:04	Turbidity	1.52	NTU
GN-GSA-MW-10	5/21/2019 10:09	Conductivity	450.6	uS/cm
GN-GSA-MW-10	5/21/2019 10:09	Depth to Water Detail	22.2	ft
GN-GSA-MW-10	5/21/2019 10:09	DO	0.3	mg/L
GN-GSA-MW-10	5/21/2019 10:09	Oxidation Reduction Potention	181.8	mv
GN-GSA-MW-10	5/21/2019 10:09	pH	6.99	pH
GN-GSA-MW-10	5/21/2019 10:09	Temperature	21.66	C
GN-GSA-MW-10	5/21/2019 10:09	Turbidity	1.15	NTU
GN-GSA-MW-10	5/21/2019 10:14	Conductivity	449.7	uS/cm
GN-GSA-MW-10	5/21/2019 10:14	Depth to Water Detail	22.21	ft
GN-GSA-MW-10	5/21/2019 10:14	DO	0.25	mg/L
GN-GSA-MW-10	5/21/2019 10:14	Oxidation Reduction Potention	180.8	mv
GN-GSA-MW-10	5/21/2019 10:14	pH	6.98	pH
GN-GSA-MW-10	5/21/2019 10:14	Temperature	21.64	C
GN-GSA-MW-10	5/21/2019 10:14	Turbidity	0.88	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-11	5/21/2019 10:46	Conductivity	161.8	uS/cm
GN-GSA-MW-11	5/21/2019 10:46	Depth to Water Detail	21.74	ft
GN-GSA-MW-11	5/21/2019 10:46	DO	2.51	mg/L
GN-GSA-MW-11	5/21/2019 10:46	Oxidation Reduction Potention	316.6	mv
GN-GSA-MW-11	5/21/2019 10:46	pH	6.63	pH
GN-GSA-MW-11	5/21/2019 10:46	Temperature	21.48	C
GN-GSA-MW-11	5/21/2019 10:46	Turbidity	1.2	NTU
GN-GSA-MW-11	5/21/2019 10:51	Conductivity	150.4	uS/cm
GN-GSA-MW-11	5/21/2019 10:51	Depth to Water Detail	21.76	ft
GN-GSA-MW-11	5/21/2019 10:51	DO	1.72	mg/L
GN-GSA-MW-11	5/21/2019 10:51	Oxidation Reduction Potention	296.9	mv
GN-GSA-MW-11	5/21/2019 10:51	pH	6.39	pH
GN-GSA-MW-11	5/21/2019 10:51	Temperature	21.41	C
GN-GSA-MW-11	5/21/2019 10:51	Turbidity	1.05	NTU
GN-GSA-MW-11	5/21/2019 10:56	Conductivity	140.8	uS/cm
GN-GSA-MW-11	5/21/2019 10:56	Depth to Water Detail	21.78	ft
GN-GSA-MW-11	5/21/2019 10:56	DO	1.16	mg/L
GN-GSA-MW-11	5/21/2019 10:56	Oxidation Reduction Potention	233.8	mv
GN-GSA-MW-11	5/21/2019 10:56	pH	6.24	pH
GN-GSA-MW-11	5/21/2019 10:56	Temperature	21.4	C
GN-GSA-MW-11	5/21/2019 10:56	Turbidity	1.1	NTU
GN-GSA-MW-11	5/21/2019 11:01	Conductivity	137.2	uS/cm
GN-GSA-MW-11	5/21/2019 11:01	Depth to Water Detail	21.81	ft
GN-GSA-MW-11	5/21/2019 11:01	DO	0.94	mg/L
GN-GSA-MW-11	5/21/2019 11:01	Oxidation Reduction Potention	213.1	mv
GN-GSA-MW-11	5/21/2019 11:01	pH	6.16	pH
GN-GSA-MW-11	5/21/2019 11:01	Temperature	21.35	C
GN-GSA-MW-11	5/21/2019 11:01	Turbidity	1.14	NTU
GN-GSA-MW-11	5/21/2019 11:06	Conductivity	131.2	uS/cm
GN-GSA-MW-11	5/21/2019 11:06	Depth to Water Detail	21.81	ft
GN-GSA-MW-11	5/21/2019 11:06	DO	0.84	mg/L
GN-GSA-MW-11	5/21/2019 11:06	Oxidation Reduction Potention	205.8	mv
GN-GSA-MW-11	5/21/2019 11:06	pH	6.12	pH
GN-GSA-MW-11	5/21/2019 11:06	Temperature	21.35	C
GN-GSA-MW-11	5/21/2019 11:06	Turbidity	0.97	NTU
GN-GSA-MW-11	5/21/2019 11:11	Conductivity	128.8	uS/cm
GN-GSA-MW-11	5/21/2019 11:11	Depth to Water Detail	21.81	ft
GN-GSA-MW-11	5/21/2019 11:11	DO	0.73	mg/L
GN-GSA-MW-11	5/21/2019 11:11	Oxidation Reduction Potention	204.4	mv
GN-GSA-MW-11	5/21/2019 11:11	pH	6.11	pH
GN-GSA-MW-11	5/21/2019 11:11	Temperature	21.31	C
GN-GSA-MW-11	5/21/2019 11:11	Turbidity	0.93	NTU
GN-GSA-MW-11	5/21/2019 11:16	Conductivity	123	uS/cm
GN-GSA-MW-11	5/21/2019 11:16	Depth to Water Detail	21.81	ft

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-11	5/21/2019 11:16	DO	0.58	mg/L
GN-GSA-MW-11	5/21/2019 11:16	Oxidation Reduction Potention	202.6	mv
GN-GSA-MW-11	5/21/2019 11:16	pH	6.04	pH
GN-GSA-MW-11	5/21/2019 11:16	Temperature	21.3	C
GN-GSA-MW-11	5/21/2019 11:16	Turbidity	1.02	NTU
GN-GSA-MW-11	5/21/2019 11:21	Conductivity	117.3	uS/cm
GN-GSA-MW-11	5/21/2019 11:21	Depth to Water Detail	21.81	ft
GN-GSA-MW-11	5/21/2019 11:21	DO	0.53	mg/L
GN-GSA-MW-11	5/21/2019 11:21	Oxidation Reduction Potention	204.5	mv
GN-GSA-MW-11	5/21/2019 11:21	pH	6	pH
GN-GSA-MW-11	5/21/2019 11:21	Temperature	21.33	C
GN-GSA-MW-11	5/21/2019 11:21	Turbidity	1.19	NTU
GN-GSA-MW-11	5/21/2019 11:26	Conductivity	116.5	uS/cm
GN-GSA-MW-11	5/21/2019 11:26	Depth to Water Detail	21.81	ft
GN-GSA-MW-11	5/21/2019 11:26	DO	0.47	mg/L
GN-GSA-MW-11	5/21/2019 11:26	Oxidation Reduction Potention	202.9	mv
GN-GSA-MW-11	5/21/2019 11:26	pH	5.99	pH
GN-GSA-MW-11	5/21/2019 11:26	Temperature	21.44	C
GN-GSA-MW-11	5/21/2019 11:26	Turbidity	1.16	NTU
GN-GSA-MW-11	5/21/2019 11:31	Conductivity	112.3	uS/cm
GN-GSA-MW-11	5/21/2019 11:31	Depth to Water Detail	21.81	ft
GN-GSA-MW-11	5/21/2019 11:31	DO	0.38	mg/L
GN-GSA-MW-11	5/21/2019 11:31	Oxidation Reduction Potention	205.4	mv
GN-GSA-MW-11	5/21/2019 11:31	pH	5.97	pH
GN-GSA-MW-11	5/21/2019 11:31	Temperature	21.39	C
GN-GSA-MW-11	5/21/2019 11:31	Turbidity	0.91	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-12	5/21/2019 11:58	Conductivity	408.8	uS/cm
GN-GSA-MW-12	5/21/2019 11:58	Depth to Water Detail	20.25	ft
GN-GSA-MW-12	5/21/2019 11:58	DO	1.19	mg/L
GN-GSA-MW-12	5/21/2019 11:58	Oxidation Reduction Potention	203.5	mv
GN-GSA-MW-12	5/21/2019 11:58	pH	7.12	pH
GN-GSA-MW-12	5/21/2019 11:58	Temperature	20.5	C
GN-GSA-MW-12	5/21/2019 11:58	Turbidity	1.41	NTU
GN-GSA-MW-12	5/21/2019 12:03	Conductivity	406.5	uS/cm
GN-GSA-MW-12	5/21/2019 12:03	Depth to Water Detail	20.26	ft
GN-GSA-MW-12	5/21/2019 12:03	DO	0.77	mg/L
GN-GSA-MW-12	5/21/2019 12:03	Oxidation Reduction Potention	210.2	mv
GN-GSA-MW-12	5/21/2019 12:03	pH	7.15	pH
GN-GSA-MW-12	5/21/2019 12:03	Temperature	20.25	C
GN-GSA-MW-12	5/21/2019 12:03	Turbidity	1.3	NTU
GN-GSA-MW-12	5/21/2019 12:08	Conductivity	400.5	uS/cm
GN-GSA-MW-12	5/21/2019 12:08	Depth to Water Detail	20.26	ft
GN-GSA-MW-12	5/21/2019 12:08	DO	0.54	mg/L
GN-GSA-MW-12	5/21/2019 12:08	Oxidation Reduction Potention	206.8	mv
GN-GSA-MW-12	5/21/2019 12:08	pH	7.13	pH
GN-GSA-MW-12	5/21/2019 12:08	Temperature	20.53	C
GN-GSA-MW-12	5/21/2019 12:08	Turbidity	1.16	NTU
GN-GSA-MW-12	5/21/2019 12:13	Conductivity	396.7	uS/cm
GN-GSA-MW-12	5/21/2019 12:13	Depth to Water Detail	20.26	ft
GN-GSA-MW-12	5/21/2019 12:13	DO	0.42	mg/L
GN-GSA-MW-12	5/21/2019 12:13	Oxidation Reduction Potention	201.3	mv
GN-GSA-MW-12	5/21/2019 12:13	pH	7.11	pH
GN-GSA-MW-12	5/21/2019 12:13	Temperature	20.54	C
GN-GSA-MW-12	5/21/2019 12:13	Turbidity	1.13	NTU
GN-GSA-MW-12	5/21/2019 12:18	Conductivity	392.1	uS/cm
GN-GSA-MW-12	5/21/2019 12:18	Depth to Water Detail	20.26	ft
GN-GSA-MW-12	5/21/2019 12:18	DO	0.3	mg/L
GN-GSA-MW-12	5/21/2019 12:18	Oxidation Reduction Potention	188.9	mv
GN-GSA-MW-12	5/21/2019 12:18	pH	7.1	pH
GN-GSA-MW-12	5/21/2019 12:18	Temperature	20.53	C
GN-GSA-MW-12	5/21/2019 12:18	Turbidity	1.21	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-13	5/21/2019 12:41	Conductivity	488.1	uS/cm
GN-GSA-MW-13	5/21/2019 12:41	Depth to Water Detail	24.74	ft
GN-GSA-MW-13	5/21/2019 12:41	DO	1.21	mg/L
GN-GSA-MW-13	5/21/2019 12:41	Oxidation Reduction Potention	215.7	mv
GN-GSA-MW-13	5/21/2019 12:41	pH	7.03	pH
GN-GSA-MW-13	5/21/2019 12:41	Temperature	20.77	C
GN-GSA-MW-13	5/21/2019 12:41	Turbidity	1.64	NTU
GN-GSA-MW-13	5/21/2019 12:46	Conductivity	487.5	uS/cm
GN-GSA-MW-13	5/21/2019 12:46	Depth to Water Detail	24.75	ft
GN-GSA-MW-13	5/21/2019 12:46	DO	1	mg/L
GN-GSA-MW-13	5/21/2019 12:46	Oxidation Reduction Potention	219.6	mv
GN-GSA-MW-13	5/21/2019 12:46	pH	7.03	pH
GN-GSA-MW-13	5/21/2019 12:46	Temperature	20.58	C
GN-GSA-MW-13	5/21/2019 12:46	Turbidity	1.62	NTU
GN-GSA-MW-13	5/21/2019 12:51	Conductivity	485	uS/cm
GN-GSA-MW-13	5/21/2019 12:51	Depth to Water Detail	24.75	ft
GN-GSA-MW-13	5/21/2019 12:51	DO	0.89	mg/L
GN-GSA-MW-13	5/21/2019 12:51	Oxidation Reduction Potention	221	mv
GN-GSA-MW-13	5/21/2019 12:51	pH	7.04	pH
GN-GSA-MW-13	5/21/2019 12:51	Temperature	20.59	C
GN-GSA-MW-13	5/21/2019 12:51	Turbidity	1.51	NTU
GN-GSA-MW-13	5/21/2019 12:56	Conductivity	482.8	uS/cm
GN-GSA-MW-13	5/21/2019 12:56	Depth to Water Detail	24.75	ft
GN-GSA-MW-13	5/21/2019 12:56	DO	0.81	mg/L
GN-GSA-MW-13	5/21/2019 12:56	Oxidation Reduction Potention	221.1	mv
GN-GSA-MW-13	5/21/2019 12:56	pH	7.05	pH
GN-GSA-MW-13	5/21/2019 12:56	Temperature	20.44	C
GN-GSA-MW-13	5/21/2019 12:56	Turbidity	1.37	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-14S	5/22/2019 10:57	Conductivity	313.8	uS/cm
GN-GSA-MW-14S	5/22/2019 10:57	Depth to Water Detail	22.26	ft
GN-GSA-MW-14S	5/22/2019 10:57	DO	1.8	mg/L
GN-GSA-MW-14S	5/22/2019 10:57	Oxidation Reduction Potention	238.5	mv
GN-GSA-MW-14S	5/22/2019 10:57	pH	7.36	pH
GN-GSA-MW-14S	5/22/2019 10:57	Temperature	20.54	C
GN-GSA-MW-14S	5/22/2019 10:57	Turbidity	5.37	NTU
GN-GSA-MW-14S	5/22/2019 11:02	Conductivity	325	uS/cm
GN-GSA-MW-14S	5/22/2019 11:02	Depth to Water Detail	22.3	ft
GN-GSA-MW-14S	5/22/2019 11:02	DO	0.78	mg/L
GN-GSA-MW-14S	5/22/2019 11:02	Oxidation Reduction Potention	231.4	mv
GN-GSA-MW-14S	5/22/2019 11:02	pH	7.38	pH
GN-GSA-MW-14S	5/22/2019 11:02	Temperature	20.32	C
GN-GSA-MW-14S	5/22/2019 11:02	Turbidity	8.53	NTU
GN-GSA-MW-14S	5/22/2019 11:07	Conductivity	338.5	uS/cm
GN-GSA-MW-14S	5/22/2019 11:07	Depth to Water Detail	22.32	ft
GN-GSA-MW-14S	5/22/2019 11:07	DO	0.56	mg/L
GN-GSA-MW-14S	5/22/2019 11:07	Oxidation Reduction Potention	98.7	mv
GN-GSA-MW-14S	5/22/2019 11:07	pH	7.41	pH
GN-GSA-MW-14S	5/22/2019 11:07	Temperature	20.27	C
GN-GSA-MW-14S	5/22/2019 11:07	Turbidity	7.48	NTU
GN-GSA-MW-14S	5/22/2019 11:12	Conductivity	341.7	uS/cm
GN-GSA-MW-14S	5/22/2019 11:12	Depth to Water Detail	22.32	ft
GN-GSA-MW-14S	5/22/2019 11:12	DO	0.49	mg/L
GN-GSA-MW-14S	5/22/2019 11:12	Oxidation Reduction Potention	31.8	mv
GN-GSA-MW-14S	5/22/2019 11:12	pH	7.42	pH
GN-GSA-MW-14S	5/22/2019 11:12	Temperature	20.28	C
GN-GSA-MW-14S	5/22/2019 11:12	Turbidity	5.59	NTU
GN-GSA-MW-14S	5/22/2019 11:17	Conductivity	337.4	uS/cm
GN-GSA-MW-14S	5/22/2019 11:17	Depth to Water Detail	22.32	ft
GN-GSA-MW-14S	5/22/2019 11:17	DO	0.47	mg/L
GN-GSA-MW-14S	5/22/2019 11:17	Oxidation Reduction Potention	18.5	mv
GN-GSA-MW-14S	5/22/2019 11:17	pH	7.43	pH
GN-GSA-MW-14S	5/22/2019 11:17	Temperature	20.24	C
GN-GSA-MW-14S	5/22/2019 11:17	Turbidity	5.64	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-15	5/22/2019 8:35	Conductivity	45	uS/cm
GN-GSA-MW-15	5/22/2019 8:35	Depth to Water Detail	20.46	ft
GN-GSA-MW-15	5/22/2019 8:35	DO	3.78	mg/L
GN-GSA-MW-15	5/22/2019 8:35	Oxidation Reduction Potention	149.9	mv
GN-GSA-MW-15	5/22/2019 8:35	pH	5.9	pH
GN-GSA-MW-15	5/22/2019 8:35	Temperature	20.81	C
GN-GSA-MW-15	5/22/2019 8:35	Turbidity	21	NTU
GN-GSA-MW-15	5/22/2019 8:40	Conductivity	44.1	uS/cm
GN-GSA-MW-15	5/22/2019 8:40	Depth to Water Detail	20.54	ft
GN-GSA-MW-15	5/22/2019 8:40	DO	3.88	mg/L
GN-GSA-MW-15	5/22/2019 8:40	Oxidation Reduction Potention	150.2	mv
GN-GSA-MW-15	5/22/2019 8:40	pH	5.86	pH
GN-GSA-MW-15	5/22/2019 8:40	Temperature	20.9	C
GN-GSA-MW-15	5/22/2019 8:40	Turbidity	11.5	NTU
GN-GSA-MW-15	5/22/2019 8:45	Conductivity	43.7	uS/cm
GN-GSA-MW-15	5/22/2019 8:45	Depth to Water Detail	20.72	ft
GN-GSA-MW-15	5/22/2019 8:45	DO	3.85	mg/L
GN-GSA-MW-15	5/22/2019 8:45	Oxidation Reduction Potention	155.3	mv
GN-GSA-MW-15	5/22/2019 8:45	pH	5.85	pH
GN-GSA-MW-15	5/22/2019 8:45	Temperature	20.95	C
GN-GSA-MW-15	5/22/2019 8:45	Turbidity	5.49	NTU
GN-GSA-MW-15	5/22/2019 8:50	Conductivity	43.3	uS/cm
GN-GSA-MW-15	5/22/2019 8:50	Depth to Water Detail	20.84	ft
GN-GSA-MW-15	5/22/2019 8:50	DO	3.71	mg/L
GN-GSA-MW-15	5/22/2019 8:50	Oxidation Reduction Potention	161.6	mv
GN-GSA-MW-15	5/22/2019 8:50	pH	5.84	pH
GN-GSA-MW-15	5/22/2019 8:50	Temperature	20.99	C
GN-GSA-MW-15	5/22/2019 8:50	Turbidity	3.78	NTU
GN-GSA-MW-15	5/22/2019 8:55	Conductivity	42.9	uS/cm
GN-GSA-MW-15	5/22/2019 8:55	Depth to Water Detail	20.91	ft
GN-GSA-MW-15	5/22/2019 8:55	DO	3.5	mg/L
GN-GSA-MW-15	5/22/2019 8:55	Oxidation Reduction Potention	165.7	mv
GN-GSA-MW-15	5/22/2019 8:55	pH	5.83	pH
GN-GSA-MW-15	5/22/2019 8:55	Temperature	21.21	C
GN-GSA-MW-15	5/22/2019 8:55	Turbidity	3.6	NTU
GN-GSA-MW-15	5/22/2019 9:00	Conductivity	42.5	uS/cm
GN-GSA-MW-15	5/22/2019 9:00	Depth to Water Detail	20.96	ft
GN-GSA-MW-15	5/22/2019 9:00	DO	3.37	mg/L
GN-GSA-MW-15	5/22/2019 9:00	Oxidation Reduction Potention	169.9	mv
GN-GSA-MW-15	5/22/2019 9:00	pH	5.83	pH
GN-GSA-MW-15	5/22/2019 9:00	Temperature	21.62	C
GN-GSA-MW-15	5/22/2019 9:00	Turbidity	2.41	NTU
GN-GSA-MW-15	5/22/2019 9:05	Conductivity	42.2	uS/cm
GN-GSA-MW-15	5/22/2019 9:05	Depth to Water Detail	21.02	ft

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-15	5/22/2019 9:05	DO	3.29	mg/L
GN-GSA-MW-15	5/22/2019 9:05	Oxidation Reduction Potention	175.5	mv
GN-GSA-MW-15	5/22/2019 9:05	pH	5.81	pH
GN-GSA-MW-15	5/22/2019 9:05	Temperature	21.8	C
GN-GSA-MW-15	5/22/2019 9:05	Turbidity	2.05	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-2	5/20/2019 15:24	Conductivity	526.3	uS/cm
GN-GSA-MW-2	5/20/2019 15:24	Depth to Water Detail	21.85	ft
GN-GSA-MW-2	5/20/2019 15:24	DO	1.42	mg/L
GN-GSA-MW-2	5/20/2019 15:24	Oxidation Reduction Potention	-71.2	mv
GN-GSA-MW-2	5/20/2019 15:24	pH	7.06	pH
GN-GSA-MW-2	5/20/2019 15:24	Temperature	23.45	C
GN-GSA-MW-2	5/20/2019 15:24	Turbidity	1.12	NTU
GN-GSA-MW-2	5/20/2019 15:29	Conductivity	518.5	uS/cm
GN-GSA-MW-2	5/20/2019 15:29	Depth to Water Detail	21.96	ft
GN-GSA-MW-2	5/20/2019 15:29	DO	1.91	mg/L
GN-GSA-MW-2	5/20/2019 15:29	Oxidation Reduction Potention	-24.5	mv
GN-GSA-MW-2	5/20/2019 15:29	pH	7.07	pH
GN-GSA-MW-2	5/20/2019 15:29	Temperature	24.06	C
GN-GSA-MW-2	5/20/2019 15:29	Turbidity	0.96	NTU
GN-GSA-MW-2	5/20/2019 15:34	Conductivity	505.6	uS/cm
GN-GSA-MW-2	5/20/2019 15:34	Depth to Water Detail	21.96	ft
GN-GSA-MW-2	5/20/2019 15:34	DO	2.24	mg/L
GN-GSA-MW-2	5/20/2019 15:34	Oxidation Reduction Potention	13.3	mv
GN-GSA-MW-2	5/20/2019 15:34	pH	7.11	pH
GN-GSA-MW-2	5/20/2019 15:34	Temperature	23.18	C
GN-GSA-MW-2	5/20/2019 15:34	Turbidity	0.86	NTU
GN-GSA-MW-2	5/20/2019 15:39	Conductivity	492.8	uS/cm
GN-GSA-MW-2	5/20/2019 15:39	Depth to Water Detail	21.95	ft
GN-GSA-MW-2	5/20/2019 15:39	DO	2.37	mg/L
GN-GSA-MW-2	5/20/2019 15:39	Oxidation Reduction Potention	30	mv
GN-GSA-MW-2	5/20/2019 15:39	pH	7.11	pH
GN-GSA-MW-2	5/20/2019 15:39	Temperature	23.99	C
GN-GSA-MW-2	5/20/2019 15:39	Turbidity	0.9	NTU
GN-GSA-MW-2	5/20/2019 15:44	Conductivity	488.1	uS/cm
GN-GSA-MW-2	5/20/2019 15:44	Depth to Water Detail	21.96	ft
GN-GSA-MW-2	5/20/2019 15:44	DO	2.39	mg/L
GN-GSA-MW-2	5/20/2019 15:44	Oxidation Reduction Potention	39.3	mv
GN-GSA-MW-2	5/20/2019 15:44	pH	7.12	pH
GN-GSA-MW-2	5/20/2019 15:44	Temperature	25.07	C
GN-GSA-MW-2	5/20/2019 15:44	Turbidity	1.03	NTU
GN-GSA-MW-2	5/20/2019 15:49	Conductivity	482.8	uS/cm
GN-GSA-MW-2	5/20/2019 15:49	Depth to Water Detail	21.96	ft
GN-GSA-MW-2	5/20/2019 15:49	DO	2.34	mg/L
GN-GSA-MW-2	5/20/2019 15:49	Oxidation Reduction Potention	60.7	mv
GN-GSA-MW-2	5/20/2019 15:49	pH	7.13	pH
GN-GSA-MW-2	5/20/2019 15:49	Temperature	24.8	C
GN-GSA-MW-2	5/20/2019 15:49	Turbidity	1.01	NTU
GN-GSA-MW-2	5/20/2019 15:54	Conductivity	483.4	uS/cm
GN-GSA-MW-2	5/20/2019 15:54	Depth to Water Detail	21.94	ft

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-2	5/20/2019 15:54	DO	2.28	mg/L
GN-GSA-MW-2	5/20/2019 15:54	Oxidation Reduction Potention	79.1	mv
GN-GSA-MW-2	5/20/2019 15:54	pH	7.13	pH
GN-GSA-MW-2	5/20/2019 15:54	Temperature	24.91	C
GN-GSA-MW-2	5/20/2019 15:54	Turbidity	0.88	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-3	5/22/2019 9:50	Conductivity	331.5	uS/cm
GN-GSA-MW-3	5/22/2019 9:50	Depth to Water Detail	21.02	ft
GN-GSA-MW-3	5/22/2019 9:50	DO	1.66	mg/L
GN-GSA-MW-3	5/22/2019 9:50	Oxidation Reduction Potention	175.7	mv
GN-GSA-MW-3	5/22/2019 9:50	pH	6.41	pH
GN-GSA-MW-3	5/22/2019 9:50	Temperature	23.54	C
GN-GSA-MW-3	5/22/2019 9:50	Turbidity	2.22	NTU
GN-GSA-MW-3	5/22/2019 9:55	Conductivity	327.8	uS/cm
GN-GSA-MW-3	5/22/2019 9:55	Depth to Water Detail	21.31	ft
GN-GSA-MW-3	5/22/2019 9:55	DO	1.37	mg/L
GN-GSA-MW-3	5/22/2019 9:55	Oxidation Reduction Potention	192.5	mv
GN-GSA-MW-3	5/22/2019 9:55	pH	6.39	pH
GN-GSA-MW-3	5/22/2019 9:55	Temperature	23.58	C
GN-GSA-MW-3	5/22/2019 9:55	Turbidity	1.14	NTU
GN-GSA-MW-3	5/22/2019 10:00	Conductivity	325.3	uS/cm
GN-GSA-MW-3	5/22/2019 10:00	Depth to Water Detail	21.59	ft
GN-GSA-MW-3	5/22/2019 10:00	DO	1.27	mg/L
GN-GSA-MW-3	5/22/2019 10:00	Oxidation Reduction Potention	206.2	mv
GN-GSA-MW-3	5/22/2019 10:00	pH	6.39	pH
GN-GSA-MW-3	5/22/2019 10:00	Temperature	23.45	C
GN-GSA-MW-3	5/22/2019 10:00	Turbidity	1.29	NTU
GN-GSA-MW-3	5/22/2019 10:05	Conductivity	322.2	uS/cm
GN-GSA-MW-3	5/22/2019 10:05	Depth to Water Detail	21.81	ft
GN-GSA-MW-3	5/22/2019 10:05	DO	1.26	mg/L
GN-GSA-MW-3	5/22/2019 10:05	Oxidation Reduction Potention	215.1	mv
GN-GSA-MW-3	5/22/2019 10:05	pH	6.38	pH
GN-GSA-MW-3	5/22/2019 10:05	Temperature	23.81	C
GN-GSA-MW-3	5/22/2019 10:05	Turbidity	1.35	NTU
GN-GSA-MW-3	5/22/2019 10:10	Conductivity	317.2	uS/cm
GN-GSA-MW-3	5/22/2019 10:10	Depth to Water Detail	21.99	ft
GN-GSA-MW-3	5/22/2019 10:10	DO	1.24	mg/L
GN-GSA-MW-3	5/22/2019 10:10	Oxidation Reduction Potention	220.1	mv
GN-GSA-MW-3	5/22/2019 10:10	pH	6.38	pH
GN-GSA-MW-3	5/22/2019 10:10	Temperature	23.59	C
GN-GSA-MW-3	5/22/2019 10:10	Turbidity	1.08	NTU
GN-GSA-MW-3	5/22/2019 10:15	Conductivity	313.1	uS/cm
GN-GSA-MW-3	5/22/2019 10:15	Depth to Water Detail	22.13	ft
GN-GSA-MW-3	5/22/2019 10:15	DO	1.29	mg/L
GN-GSA-MW-3	5/22/2019 10:15	Oxidation Reduction Potention	221.3	mv
GN-GSA-MW-3	5/22/2019 10:15	pH	6.38	pH
GN-GSA-MW-3	5/22/2019 10:15	Temperature	23.77	C
GN-GSA-MW-3	5/22/2019 10:15	Turbidity	1.18	NTU
GN-GSA-MW-3	5/22/2019 10:20	Conductivity	309.1	uS/cm
GN-GSA-MW-3	5/22/2019 10:20	Depth to Water Detail	22.28	ft

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-3	5/22/2019 10:20	DO	1.35	mg/L
GN-GSA-MW-3	5/22/2019 10:20	Oxidation Reduction Potention	223	mv
GN-GSA-MW-3	5/22/2019 10:20	pH	6.38	pH
GN-GSA-MW-3	5/22/2019 10:20	Temperature	23.81	C
GN-GSA-MW-3	5/22/2019 10:20	Turbidity	1.23	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-5	5/20/2019 11:16	Conductivity	675.4	uS/cm
GN-GSA-MW-5	5/20/2019 11:16	Depth to Water Detail	30.02	ft
GN-GSA-MW-5	5/20/2019 11:16	DO	0.55	mg/L
GN-GSA-MW-5	5/20/2019 11:16	Oxidation Reduction Potention	-53.6	mv
GN-GSA-MW-5	5/20/2019 11:16	pH	6.61	pH
GN-GSA-MW-5	5/20/2019 11:16	Temperature	23.32	C
GN-GSA-MW-5	5/20/2019 11:16	Turbidity	1.62	NTU
GN-GSA-MW-5	5/20/2019 11:21	Conductivity	662.1	uS/cm
GN-GSA-MW-5	5/20/2019 11:21	Depth to Water Detail	30.02	ft
GN-GSA-MW-5	5/20/2019 11:21	DO	0.54	mg/L
GN-GSA-MW-5	5/20/2019 11:21	Oxidation Reduction Potention	-51.1	mv
GN-GSA-MW-5	5/20/2019 11:21	pH	6.61	pH
GN-GSA-MW-5	5/20/2019 11:21	Temperature	23.36	C
GN-GSA-MW-5	5/20/2019 11:21	Turbidity	1.6	NTU
GN-GSA-MW-5	5/20/2019 11:26	Conductivity	647.8	uS/cm
GN-GSA-MW-5	5/20/2019 11:26	Depth to Water Detail	30.02	ft
GN-GSA-MW-5	5/20/2019 11:26	DO	0.54	mg/L
GN-GSA-MW-5	5/20/2019 11:26	Oxidation Reduction Potention	-47.8	mv
GN-GSA-MW-5	5/20/2019 11:26	pH	6.6	pH
GN-GSA-MW-5	5/20/2019 11:26	Temperature	23.38	C
GN-GSA-MW-5	5/20/2019 11:26	Turbidity	1.4	NTU
GN-GSA-MW-5	5/20/2019 11:31	Conductivity	641.4	uS/cm
GN-GSA-MW-5	5/20/2019 11:31	Depth to Water Detail	30.02	ft
GN-GSA-MW-5	5/20/2019 11:31	DO	0.54	mg/L
GN-GSA-MW-5	5/20/2019 11:31	Oxidation Reduction Potention	-45.4	mv
GN-GSA-MW-5	5/20/2019 11:31	pH	6.59	pH
GN-GSA-MW-5	5/20/2019 11:31	Temperature	23.14	C
GN-GSA-MW-5	5/20/2019 11:31	Turbidity	1.51	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-6	5/20/2019 12:19	Conductivity	25.8	uS/cm
GN-GSA-MW-6	5/20/2019 12:19	Depth to Water Detail	29.13	ft
GN-GSA-MW-6	5/20/2019 12:19	DO	2.16	mg/L
GN-GSA-MW-6	5/20/2019 12:19	Oxidation Reduction Potention	293.9	mv
GN-GSA-MW-6	5/20/2019 12:19	pH	4.62	pH
GN-GSA-MW-6	5/20/2019 12:19	Temperature	21.41	C
GN-GSA-MW-6	5/20/2019 12:19	Turbidity	9	NTU
GN-GSA-MW-6	5/20/2019 12:24	Conductivity	26.3	uS/cm
GN-GSA-MW-6	5/20/2019 12:24	Depth to Water Detail	29.15	ft
GN-GSA-MW-6	5/20/2019 12:24	DO	1.29	mg/L
GN-GSA-MW-6	5/20/2019 12:24	Oxidation Reduction Potention	301	mv
GN-GSA-MW-6	5/20/2019 12:24	pH	4.58	pH
GN-GSA-MW-6	5/20/2019 12:24	Temperature	21.46	C
GN-GSA-MW-6	5/20/2019 12:24	Turbidity	4.31	NTU
GN-GSA-MW-6	5/20/2019 12:29	Conductivity	26.4	uS/cm
GN-GSA-MW-6	5/20/2019 12:29	Depth to Water Detail	29.15	ft
GN-GSA-MW-6	5/20/2019 12:29	DO	0.77	mg/L
GN-GSA-MW-6	5/20/2019 12:29	Oxidation Reduction Potention	298.4	mv
GN-GSA-MW-6	5/20/2019 12:29	pH	4.59	pH
GN-GSA-MW-6	5/20/2019 12:29	Temperature	21.2	C
GN-GSA-MW-6	5/20/2019 12:29	Turbidity	2.2	NTU
GN-GSA-MW-6	5/20/2019 12:34	Conductivity	27.5	uS/cm
GN-GSA-MW-6	5/20/2019 12:34	Depth to Water Detail	29.15	ft
GN-GSA-MW-6	5/20/2019 12:34	DO	0.63	mg/L
GN-GSA-MW-6	5/20/2019 12:34	Oxidation Reduction Potention	296	mv
GN-GSA-MW-6	5/20/2019 12:34	pH	4.57	pH
GN-GSA-MW-6	5/20/2019 12:34	Temperature	21.22	C
GN-GSA-MW-6	5/20/2019 12:34	Turbidity	2.11	NTU
GN-GSA-MW-6	5/20/2019 12:39	Conductivity	27.3	uS/cm
GN-GSA-MW-6	5/20/2019 12:39	Depth to Water Detail	29.15	ft
GN-GSA-MW-6	5/20/2019 12:39	DO	0.52	mg/L
GN-GSA-MW-6	5/20/2019 12:39	Oxidation Reduction Potention	290.5	mv
GN-GSA-MW-6	5/20/2019 12:39	pH	4.58	pH
GN-GSA-MW-6	5/20/2019 12:39	Temperature	21.27	C
GN-GSA-MW-6	5/20/2019 12:39	Turbidity	1.54	NTU
GN-GSA-MW-6	5/20/2019 12:44	Conductivity	27.1	uS/cm
GN-GSA-MW-6	5/20/2019 12:44	Depth to Water Detail	29.15	ft
GN-GSA-MW-6	5/20/2019 12:44	DO	0.47	mg/L
GN-GSA-MW-6	5/20/2019 12:44	Oxidation Reduction Potention	288.3	mv
GN-GSA-MW-6	5/20/2019 12:44	pH	4.59	pH
GN-GSA-MW-6	5/20/2019 12:44	Temperature	21.52	C
GN-GSA-MW-6	5/20/2019 12:44	Turbidity	1.49	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-7	5/20/2019 13:24	Conductivity	383.9	uS/cm
GN-GSA-MW-7	5/20/2019 13:24	Depth to Water Detail	27.62	ft
GN-GSA-MW-7	5/20/2019 13:24	DO	2.5	mg/L
GN-GSA-MW-7	5/20/2019 13:24	Oxidation Reduction Potention	44	mv
GN-GSA-MW-7	5/20/2019 13:24	pH	6.74	pH
GN-GSA-MW-7	5/20/2019 13:24	Temperature	24.58	C
GN-GSA-MW-7	5/20/2019 13:24	Turbidity	1.39	NTU
GN-GSA-MW-7	5/20/2019 13:29	Conductivity	386.3	uS/cm
GN-GSA-MW-7	5/20/2019 13:29	Depth to Water Detail	27.89	ft
GN-GSA-MW-7	5/20/2019 13:29	DO	3.64	mg/L
GN-GSA-MW-7	5/20/2019 13:29	Oxidation Reduction Potention	91.8	mv
GN-GSA-MW-7	5/20/2019 13:29	pH	6.85	pH
GN-GSA-MW-7	5/20/2019 13:29	Temperature	24.23	C
GN-GSA-MW-7	5/20/2019 13:29	Turbidity	1.17	NTU
GN-GSA-MW-7	5/20/2019 13:34	Conductivity	383.5	uS/cm
GN-GSA-MW-7	5/20/2019 13:34	Depth to Water Detail	27.96	ft
GN-GSA-MW-7	5/20/2019 13:34	DO	3.78	mg/L
GN-GSA-MW-7	5/20/2019 13:34	Oxidation Reduction Potention	115.7	mv
GN-GSA-MW-7	5/20/2019 13:34	pH	6.88	pH
GN-GSA-MW-7	5/20/2019 13:34	Temperature	25.11	C
GN-GSA-MW-7	5/20/2019 13:34	Turbidity	1.24	NTU
GN-GSA-MW-7	5/20/2019 13:39	Conductivity	392.9	uS/cm
GN-GSA-MW-7	5/20/2019 13:39	Depth to Water Detail	28.06	ft
GN-GSA-MW-7	5/20/2019 13:39	DO	3.59	mg/L
GN-GSA-MW-7	5/20/2019 13:39	Oxidation Reduction Potention	113.2	mv
GN-GSA-MW-7	5/20/2019 13:39	pH	6.88	pH
GN-GSA-MW-7	5/20/2019 13:39	Temperature	25.54	C
GN-GSA-MW-7	5/20/2019 13:39	Turbidity	1.17	NTU
GN-GSA-MW-7	5/20/2019 13:44	Conductivity	388.3	uS/cm
GN-GSA-MW-7	5/20/2019 13:44	Depth to Water Detail	28.12	ft
GN-GSA-MW-7	5/20/2019 13:44	DO	3.35	mg/L
GN-GSA-MW-7	5/20/2019 13:44	Oxidation Reduction Potention	117.3	mv
GN-GSA-MW-7	5/20/2019 13:44	pH	6.86	pH
GN-GSA-MW-7	5/20/2019 13:44	Temperature	24.64	C
GN-GSA-MW-7	5/20/2019 13:44	Turbidity	1.2	NTU
GN-GSA-MW-7	5/20/2019 13:49	Conductivity	387	uS/cm
GN-GSA-MW-7	5/20/2019 13:49	Depth to Water Detail	28.16	ft
GN-GSA-MW-7	5/20/2019 13:49	DO	3.12	mg/L
GN-GSA-MW-7	5/20/2019 13:49	Oxidation Reduction Potention	117.3	mv
GN-GSA-MW-7	5/20/2019 13:49	pH	6.85	pH
GN-GSA-MW-7	5/20/2019 13:49	Temperature	25.24	C
GN-GSA-MW-7	5/20/2019 13:49	Turbidity	1.25	NTU
GN-GSA-MW-7	5/20/2019 13:54	Conductivity	383.9	uS/cm
GN-GSA-MW-7	5/20/2019 13:54	Depth to Water Detail	28.23	ft

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-7	5/20/2019 13:54	DO	2.93	mg/L
GN-GSA-MW-7	5/20/2019 13:54	Oxidation Reduction Potention	120.9	mv
GN-GSA-MW-7	5/20/2019 13:54	pH	6.83	pH
GN-GSA-MW-7	5/20/2019 13:54	Temperature	25.76	C
GN-GSA-MW-7	5/20/2019 13:54	Turbidity	1.5	NTU
GN-GSA-MW-7	5/20/2019 13:59	Conductivity	382.8	uS/cm
GN-GSA-MW-7	5/20/2019 13:59	Depth to Water Detail	28.23	ft
GN-GSA-MW-7	5/20/2019 13:59	DO	2.82	mg/L
GN-GSA-MW-7	5/20/2019 13:59	Oxidation Reduction Potention	128.1	mv
GN-GSA-MW-7	5/20/2019 13:59	pH	6.82	pH
GN-GSA-MW-7	5/20/2019 13:59	Temperature	25.84	C
GN-GSA-MW-7	5/20/2019 13:59	Turbidity	1.15	NTU
GN-GSA-MW-7	5/20/2019 14:04	Conductivity	379	uS/cm
GN-GSA-MW-7	5/20/2019 14:04	Depth to Water Detail	28.28	ft
GN-GSA-MW-7	5/20/2019 14:04	DO	2.72	mg/L
GN-GSA-MW-7	5/20/2019 14:04	Oxidation Reduction Potention	135.9	mv
GN-GSA-MW-7	5/20/2019 14:04	pH	6.81	pH
GN-GSA-MW-7	5/20/2019 14:04	Temperature	26.12	C
GN-GSA-MW-7	5/20/2019 14:04	Turbidity	1.37	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-8	5/21/2019 8:07	Conductivity	322.3	uS/cm
GN-GSA-MW-8	5/21/2019 8:07	Depth to Water Detail	21.99	ft
GN-GSA-MW-8	5/21/2019 8:07	DO	0.77	mg/L
GN-GSA-MW-8	5/21/2019 8:07	Oxidation Reduction Potention	-49.4	mv
GN-GSA-MW-8	5/21/2019 8:07	pH	7.18	pH
GN-GSA-MW-8	5/21/2019 8:07	Temperature	20.65	C
GN-GSA-MW-8	5/21/2019 8:07	Turbidity	2.5	NTU
GN-GSA-MW-8	5/21/2019 8:12	Conductivity	322.7	uS/cm
GN-GSA-MW-8	5/21/2019 8:12	Depth to Water Detail	22	ft
GN-GSA-MW-8	5/21/2019 8:12	DO	0.78	mg/L
GN-GSA-MW-8	5/21/2019 8:12	Oxidation Reduction Potention	-80.1	mv
GN-GSA-MW-8	5/21/2019 8:12	pH	7.24	pH
GN-GSA-MW-8	5/21/2019 8:12	Temperature	20.72	C
GN-GSA-MW-8	5/21/2019 8:12	Turbidity	2.59	NTU
GN-GSA-MW-8	5/21/2019 8:17	Conductivity	322.4	uS/cm
GN-GSA-MW-8	5/21/2019 8:17	Depth to Water Detail	22.07	ft
GN-GSA-MW-8	5/21/2019 8:17	DO	0.8	mg/L
GN-GSA-MW-8	5/21/2019 8:17	Oxidation Reduction Potention	-90.6	mv
GN-GSA-MW-8	5/21/2019 8:17	pH	7.29	pH
GN-GSA-MW-8	5/21/2019 8:17	Temperature	20.77	C
GN-GSA-MW-8	5/21/2019 8:17	Turbidity	1.87	NTU
GN-GSA-MW-8	5/21/2019 8:22	Conductivity	322.6	uS/cm
GN-GSA-MW-8	5/21/2019 8:22	Depth to Water Detail	22.13	ft
GN-GSA-MW-8	5/21/2019 8:22	DO	0.82	mg/L
GN-GSA-MW-8	5/21/2019 8:22	Oxidation Reduction Potention	-94.9	mv
GN-GSA-MW-8	5/21/2019 8:22	pH	7.31	pH
GN-GSA-MW-8	5/21/2019 8:22	Temperature	20.94	C
GN-GSA-MW-8	5/21/2019 8:22	Turbidity	1.84	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-9	5/21/2019 8:59	Conductivity	151.2	uS/cm
GN-GSA-MW-9	5/21/2019 8:59	Depth to Water Detail	22.24	ft
GN-GSA-MW-9	5/21/2019 8:59	DO	0.84	mg/L
GN-GSA-MW-9	5/21/2019 8:59	Oxidation Reduction Potention	145.1	mv
GN-GSA-MW-9	5/21/2019 8:59	pH	6.38	pH
GN-GSA-MW-9	5/21/2019 8:59	Temperature	21.08	C
GN-GSA-MW-9	5/21/2019 8:59	Turbidity	93.3	NTU
GN-GSA-MW-9	5/21/2019 9:04	Conductivity	153.9	uS/cm
GN-GSA-MW-9	5/21/2019 9:04	Depth to Water Detail	22.64	ft
GN-GSA-MW-9	5/21/2019 9:04	DO	0.57	mg/L
GN-GSA-MW-9	5/21/2019 9:04	Oxidation Reduction Potention	157.2	mv
GN-GSA-MW-9	5/21/2019 9:04	pH	6.23	pH
GN-GSA-MW-9	5/21/2019 9:04	Temperature	20.95	C
GN-GSA-MW-9	5/21/2019 9:04	Turbidity	46.3	NTU
GN-GSA-MW-9	5/21/2019 9:09	Conductivity	197	uS/cm
GN-GSA-MW-9	5/21/2019 9:09	Depth to Water Detail	22.76	ft
GN-GSA-MW-9	5/21/2019 9:09	DO	0.38	mg/L
GN-GSA-MW-9	5/21/2019 9:09	Oxidation Reduction Potention	157.4	mv
GN-GSA-MW-9	5/21/2019 9:09	pH	6.32	pH
GN-GSA-MW-9	5/21/2019 9:09	Temperature	20.95	C
GN-GSA-MW-9	5/21/2019 9:09	Turbidity	21.5	NTU
GN-GSA-MW-9	5/21/2019 9:14	Conductivity	234.6	uS/cm
GN-GSA-MW-9	5/21/2019 9:14	Depth to Water Detail	22.87	ft
GN-GSA-MW-9	5/21/2019 9:14	DO	0.32	mg/L
GN-GSA-MW-9	5/21/2019 9:14	Oxidation Reduction Potention	136.2	mv
GN-GSA-MW-9	5/21/2019 9:14	pH	6.46	pH
GN-GSA-MW-9	5/21/2019 9:14	Temperature	21.09	C
GN-GSA-MW-9	5/21/2019 9:14	Turbidity	17	NTU
GN-GSA-MW-9	5/21/2019 9:19	Conductivity	268.1	uS/cm
GN-GSA-MW-9	5/21/2019 9:19	Depth to Water Detail	22.89	ft
GN-GSA-MW-9	5/21/2019 9:19	DO	0.28	mg/L
GN-GSA-MW-9	5/21/2019 9:19	Oxidation Reduction Potention	128.1	mv
GN-GSA-MW-9	5/21/2019 9:19	pH	6.59	pH
GN-GSA-MW-9	5/21/2019 9:19	Temperature	21.24	C
GN-GSA-MW-9	5/21/2019 9:19	Turbidity	10.9	NTU
GN-GSA-MW-9	5/21/2019 9:24	Conductivity	286.3	uS/cm
GN-GSA-MW-9	5/21/2019 9:24	Depth to Water Detail	22.89	ft
GN-GSA-MW-9	5/21/2019 9:24	DO	0.27	mg/L
GN-GSA-MW-9	5/21/2019 9:24	Oxidation Reduction Potention	130.3	mv
GN-GSA-MW-9	5/21/2019 9:24	pH	6.7	pH
GN-GSA-MW-9	5/21/2019 9:24	Temperature	21.21	C
GN-GSA-MW-9	5/21/2019 9:24	Turbidity	9.25	NTU
GN-GSA-MW-9	5/21/2019 9:29	Conductivity	292.7	uS/cm
GN-GSA-MW-9	5/21/2019 9:29	Depth to Water Detail	22.89	ft

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-9	5/21/2019 9:29	DO	0.26	mg/L
GN-GSA-MW-9	5/21/2019 9:29	Oxidation Reduction Potention	134.6	mv
GN-GSA-MW-9	5/21/2019 9:29	pH	6.76	pH
GN-GSA-MW-9	5/21/2019 9:29	Temperature	21.22	C
GN-GSA-MW-9	5/21/2019 9:29	Turbidity	7.7	NTU
GN-GSA-MW-9	5/21/2019 9:34	Conductivity	295.3	uS/cm
GN-GSA-MW-9	5/21/2019 9:34	Depth to Water Detail	22.89	ft
GN-GSA-MW-9	5/21/2019 9:34	DO	0.26	mg/L
GN-GSA-MW-9	5/21/2019 9:34	Oxidation Reduction Potention	136.7	mv
GN-GSA-MW-9	5/21/2019 9:34	pH	6.79	pH
GN-GSA-MW-9	5/21/2019 9:34	Temperature	21.34	C
GN-GSA-MW-9	5/21/2019 9:34	Turbidity	4.55	NTU

**2nd**

**Semi-Annual**

**Monitoring Event**

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

## Field Case Narrative



### E. C. Gaston Gypsum Storage Area

#### 2019 Compliance Event 2

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

Heavy equipment was moving gypsum in the area while pumping and sampling wells MW-5 and MW-6.

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 :** WMWGASG\_1238

**Project/Site :** Gaston Gypsum  
Wilsonville, AL 35186

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

**Attention :** Dustin Brooks, Greg Dyer, & Lauren Parker

**Released By :** Laura Midkiff  
(205) 664-6197  
[lmidkif@southernco.com](mailto:lmidkif@southernco.com)

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



October 31, 2019

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on September 05, 2019. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114  
Issued By: State of Florida, Department of Health  
Expiration: June 30, 2020

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

Sincerely,

Quality Control: **Laura Midkiff**

Digitally signed by Laura Midkiff  
DN: cn=Laura Midkiff, o=Alabama Power  
Company, ou=Environmental Affairs,  
email=midkiff@southernco.com, c=US  
Date: 2019.10.31 09:16:12 -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=tmaske@southernco.com,  
c=US  
Date: 2019.10.31 12:22:28 -05'00'



## REPORT OF LABORATORY ANALYSIS

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



## Case Narrative

Metals ICP

Gaston Gypsum

WMWGASG\_1238

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ20013	654956	WMWGASG_1238
AZ20014	654956	WMWGASG_1238
AZ20015	654956	WMWGASG_1238
AZ20016	654956	WMWGASG_1238
AZ20017	654956	WMWGASG_1238
AZ20018	654956	WMWGASG_1238
AZ20019	654956	WMWGASG_1238
AZ20020	654956	WMWGASG_1238
AZ20021	654956	WMWGASG_1238
AZ20022	654956	WMWGASG_1238
AZ20023	654957	WMWGASG_1238
AZ20024	654957	WMWGASG_1238
AZ20025	654957	WMWGASG_1238
AZ20026	654957	WMWGASG_1238
AZ20027	654957	WMWGASG_1238
AZ20028	654957	WMWGASG_1238
AZ20029	654957	WMWGASG_1238
AZ20030	654957	WMWGASG_1238
AZ20031	654957	WMWGASG_1238

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

### General Quality Control Procedures:

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

### Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
  - AZ20031 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.

## Case Narrative

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

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ20013	Calcium	x10.15
AZ20014	Calcium	x10.15
AZ20015	Calcium	x10.15
AZ20018	Calcium	x10.15
AZ20019	Calcium	x10.15
AZ20020	Calcium	x10.15
AZ20021	Calcium	x10.15
AZ20022	Calcium	x10.15
AZ20023	Calcium	x10.15
AZ20024	Calcium	x10.15
AZ20025	Calcium	x10.15
AZ20029	Calcium	x10.15
AZ20031	Calcium	x10.15

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

## Case Narrative

Metals ICPMS

Gaston Gypsum

WMWGASG\_1238

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ20013	655189	WMWGASG_1238
AZ20014	655189	WMWGASG_1238
AZ20015	655189	WMWGASG_1238
AZ20016	655189	WMWGASG_1238
AZ20017	655189	WMWGASG_1238
AZ20018	655189	WMWGASG_1238
AZ20019	655189	WMWGASG_1238
AZ20020	655189	WMWGASG_1238
AZ20021	655189	WMWGASG_1238
AZ20022	655189	WMWGASG_1238
AZ20023	655190	WMWGASG_1238
AZ20024	655190	WMWGASG_1238
AZ20025	655190	WMWGASG_1238
AZ20026	655190	WMWGASG_1238
AZ20027	655190	WMWGASG_1238
AZ20028	655190	WMWGASG_1238
AZ20029	655190	WMWGASG_1238
AZ20030	655190	WMWGASG_1238
AZ20031	655190	WMWGASG_1238

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

### General Quality Control Procedures:

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

### Matrix Specific Quality Control Procedures:

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

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

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ20021	Barium	x5.075

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

Mercury

Gaston Gypsum

WMWGASG\_1238

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ20013	655237	WMWGASG_1238
AZ20014	655237	WMWGASG_1238
AZ20015	655237	WMWGASG_1238
AZ20016	655237	WMWGASG_1238
AZ20017	655237	WMWGASG_1238
AZ20018	655237	WMWGASG_1238
AZ20019	655237	WMWGASG_1238
AZ20020	655237	WMWGASG_1238
AZ20021	655237	WMWGASG_1238
AZ20022	655237	WMWGASG_1238
AZ20023	655238	WMWGASG_1238
AZ20024	655238	WMWGASG_1238
AZ20025	655238	WMWGASG_1238
AZ20026	655238	WMWGASG_1238
AZ20027	655238	WMWGASG_1238
AZ20028	655238	WMWGASG_1238
AZ20029	655238	WMWGASG_1238
AZ20030	655238	WMWGASG_1238
AZ20031	655238	WMWGASG_1238

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.

## Case Narrative

TDS

Gaston Gypsum

WMWGASG\_1238

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ20013	655195	WMWGASG_1238
AZ20014	655195	WMWGASG_1238
AZ20015	655195	WMWGASG_1238
AZ20016	655195	WMWGASG_1238
AZ20017	655195	WMWGASG_1238
AZ20018	655195	WMWGASG_1238
AZ20019	655195	WMWGASG_1238
AZ20020	655195	WMWGASG_1238
AZ20021	655195	WMWGASG_1238
AZ20022	655195	WMWGASG_1238
AZ20023	655196	WMWGASG_1238
AZ20024	655196	WMWGASG_1238
AZ20025	655196	WMWGASG_1238
AZ20026	655196	WMWGASG_1238
AZ20027	655196	WMWGASG_1238
AZ20028	655196	WMWGASG_1238
AZ20029	655196	WMWGASG_1238
AZ20030	655196	WMWGASG_1238
AZ20031	655196	WMWGASG_1238

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:
  - AZ20017
  - AZ20026
  - AZ20028

## Case Narrative

Anions

Gaston Gypsum

WMWGASG\_1238

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ20013	655031, 655033, & 655216	WMWGASG_1238
AZ20014	655031, 655033, & 655216	WMWGASG_1238
AZ20015	655031, 655033, & 655216	WMWGASG_1238
AZ20016	655031, 655033, & 655216	WMWGASG_1238
AZ20017	655031, 655033, & 655216	WMWGASG_1238
AZ20018	655031, 655033, & 655216	WMWGASG_1238
AZ20019	655031, 655033, & 655216	WMWGASG_1238
AZ20020	655031, 655033, & 655216	WMWGASG_1238
AZ20021	655031, 655033, & 655216	WMWGASG_1238
AZ20022	655031, 655033, & 655216	WMWGASG_1238
AZ20023	655032, 655034, & 655217	WMWGASG_1238
AZ20024	655032, 655034, & 655217	WMWGASG_1238
AZ20025	655032, 655034, & 655217	WMWGASG_1238
AZ20026	655032, 655034, & 655217	WMWGASG_1238
AZ20027	655032, 655034, & 655217	WMWGASG_1238
AZ20028	655032, 655034, & 655217	WMWGASG_1238
AZ20029	655032, 655034, & 655217	WMWGASG_1238
AZ20030	655032, 655034, & 655217	WMWGASG_1238
AZ20031	655032, 655034, & 655217	WMWGASG_1238

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

### General Quality Control Procedures:

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

### Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met, except for the following:
  - AZ20031 precision was outside of acceptance criteria for fluoride. However, both sample and duplicate results were less than the reporting limit.

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

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ20029	Sulfate	x4

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

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-8

**Location Code:** WMWGASG  
**Collected:** 9/3/19 11:03  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20013

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 09:36		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 11:49		10.15	57.4	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 09:36		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:00		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:00		1.015	0.00118	mg/L	0.001	0.005	J
* Barium, Total	9/5/19 10:39	9/5/19 18:00		1.015	0.0314	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:00		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:00		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:00		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:00		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:00		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:00		1.015	0.00437	mg/L	0.002	0.01	J
* Selenium, Total	9/5/19 10:39	9/5/19 18:00		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:00		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 11:55		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	184	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:06	9/5/19 13:06		1	1.64	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 15:58	9/5/19 15:58		1	0.123	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:43	9/9/19 14:43		1	4.15	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/3/19 10:59	9/3/19 10:59			330.74	uS/cm			FA
pH	9/3/19 10:59	9/3/19 10:59			7.46	SU			FA
Temperature	9/3/19 10:59	9/3/19 10:59			23.08	C			FA
Turbidity	9/3/19 10:59	9/3/19 10:59			0.58	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/3/19 11:03

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-8

**Laboratory ID Number:** AZ20013

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/3/19 11:03  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-8

**Laboratory ID Number:** AZ20013

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-9

**Location Code:** WMWGASG  
**Collected:** 9/3/19 12:35  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20014

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 09:39		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 11:52		10.15	60.3	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 09:39		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:02		1.015	0.0271	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:02		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 11:58		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	189	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:08	9/5/19 13:08		1	2.26	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:00	9/5/19 16:00		1	0.0554	mg/L	0.05	0.1	J
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:45	9/9/19 14:45		1	6.53	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/3/19 12:31	9/3/19 12:31			333.12	uS/cm			FA
pH	9/3/19 12:31	9/3/19 12:31			6.53	SU			FA
Temperature	9/3/19 12:31	9/3/19 12:31			21.57	C			FA
Turbidity	9/3/19 12:31	9/3/19 12:31			4.31	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/3/19 12:35

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-9

**Laboratory ID Number:** AZ20014

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/3/19 12:35  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-9

**Laboratory ID Number:** AZ20014

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-10

**Location Code:** WMWGASG  
**Collected:** 9/3/19 14:00  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20015

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 09:42		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 11:55		10.15	102	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 09:42		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:05		1.015	0.0377	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:05		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 12:00		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	260	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:09	9/5/19 13:09		1	2.84	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:01	9/5/19 16:01		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:46	9/9/19 14:46		1	1.73	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/3/19 13:55	9/3/19 13:55			443.79	uS/cm			FA
pH	9/3/19 13:55	9/3/19 13:55			6.67	SU			FA
Temperature	9/3/19 13:55	9/3/19 13:55			21.88	C			FA
Turbidity	9/3/19 13:55	9/3/19 13:55			0.19	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/3/19 14:00

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-10

**Laboratory ID Number:** AZ20015

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/3/19 14:00  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-10

**Laboratory ID Number:** AZ20015

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-11

**Location Code:** WMWGASG  
**Collected:** 9/3/19 15:35  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20016

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 09:45		1.015	0.0452	mg/L	0.03	0.1	J
* Calcium, Total	9/5/19 11:15	9/6/19 09:45		1.015	8.90	mg/L	0.1	0.5	
* Lithium, Total	9/5/19 11:15	9/6/19 09:45		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:08		1.015	0.00656	mg/L	0.002	0.01	J
* Beryllium, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:08		1.015	0.00298	mg/L	0.002	0.005	J
* Lead, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:08		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 12:02		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	51.3	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:10	9/5/19 13:10		1	7.10	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:02	9/5/19 16:02		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:47	9/9/19 14:47		1	2.83	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/3/19 15:31	9/3/19 15:31			88.99	uS/cm			FA
pH	9/3/19 15:31	9/3/19 15:31			5.12	SU			FA
Temperature	9/3/19 15:31	9/3/19 15:31			22.51	C			FA
Turbidity	9/3/19 15:31	9/3/19 15:31			0.06	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/3/19 15:35

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-11

**Laboratory ID Number:** AZ20016

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/3/19 15:35  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-11

**Laboratory ID Number:** AZ20016

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum Field Blank

**Location Code:** WMWGASGFB  
**Collected:** 9/3/19 15:50  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20017

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 09:48		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 09:48		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	9/5/19 11:15	9/6/19 09:48		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:10		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 12:05		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:11	9/5/19 13:11		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:03	9/5/19 16:03		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:48	9/9/19 14:48		1	Not Detected	mg/L	0.50	1	U

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASGFB  
**Sample Date:** 9/3/19 15:50  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum Field Blank

**Laboratory ID Number:** AZ20017

Sample	Analysis	Units	MB					Standard		Rec		Prec
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASGFB

**Sample Date:** 9/3/19 15:50

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum Field Blank

**Laboratory ID Number:** AZ20017

Sample	Analysis	Units	MB		Spike	MS	Sample Duplicate	Standard		Rec	Limit	Prec	Limit
			MB	Limit				Standard	Limit				
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-12

**Location Code:** WMWGASG  
**Collected:** 9/4/19 10:00  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20018

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 09:51		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 11:58		10.15	74.2	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 09:51		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:13		1.015	0.0205	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:13		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 12:07		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	217	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:12	9/5/19 13:12		1	2.73	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:04	9/5/19 16:04		1	0.0547	mg/L	0.05	0.1	J
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:50	9/9/19 14:50		1	6.25	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 09:57	9/4/19 09:57			391.41	uS/cm			FA
pH	9/4/19 09:57	9/4/19 09:57			7.24	SU			FA
Temperature	9/4/19 09:57	9/4/19 09:57			21.97	C			FA
Turbidity	9/4/19 09:57	9/4/19 09:57			0.14	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 10:00

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-12

**Laboratory ID Number:** AZ20018

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 10:00  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-12

**Laboratory ID Number:** AZ20018

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-12 DUP

**Location Code:** WMWGASG  
**Collected:** 9/4/19 10:00  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20019

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 09:54		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 12:01		10.15	74.3	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 09:54		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:16		1.015	0.0216	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:16		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 12:09		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	212	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>									
* Chloride	9/5/19 13:14	9/5/19 13:14		1	2.71	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:06	9/5/19 16:06		1	0.0569	mg/L	0.05	0.1	J
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:51	9/9/19 14:51		1	6.28	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 09:57	9/4/19 09:57			391.41	uS/cm			FA
pH	9/4/19 09:57	9/4/19 09:57			7.24	SU			FA
Temperature	9/4/19 09:57	9/4/19 09:57			21.97	C			FA
Turbidity	9/4/19 09:57	9/4/19 09:57			0.14	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 10:00

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-12 DUP

**Laboratory ID Number:** AZ20019

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 10:00  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-12 DUP

**Laboratory ID Number:** AZ20019

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-13

**Location Code:** WMWGASG  
**Collected:** 9/4/19 11:55  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20020

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 09:57		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 12:04		10.15	93.7	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 09:57		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:18		1.015	0.0455	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:18		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 12:12		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	271	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:15	9/5/19 13:15		1	3.33	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:07	9/5/19 16:07		1	0.0555	mg/L	0.05	0.1	J
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:52	9/9/19 14:52		1	8.18	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 11:51	9/4/19 11:51			490.68	uS/cm			FA
pH	9/4/19 11:51	9/4/19 11:51			6.71	SU			FA
Temperature	9/4/19 11:51	9/4/19 11:51			20.84	C			FA
Turbidity	9/4/19 11:51	9/4/19 11:51			0.36	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 11:55

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-13

**Laboratory ID Number:** AZ20020

Sample	Analysis	Units	MB				Standard	Limit	Standard			Prec	Rec	Prec	Limit
			MB	Limit	Spike	MS			Rec	Limit	Prec	Limit	Rec	Prec	Limit
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20		
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20		
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20		
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20		
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20		
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20		
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20		
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20		
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20		
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20		
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20		
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20		
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20		
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20		
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20		

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 11:55  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-13

**Laboratory ID Number:** AZ20020

Sample	Analysis	Units	MB		Spike	MS	Sample Duplicate	Standard		Rec	Limit	Prec	Limit
			MB	Limit				Standard	Limit				
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

---

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-1

**Location Code:** WMWGASG  
**Collected:** 9/4/19 13:17  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20021

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:00		1.015	0.0363	mg/L	0.03	0.1	J
* Calcium, Total	9/5/19 11:15	9/6/19 12:07		10.15	41.4	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 10:00		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:21		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:21		1.015	0.00534	mg/L	0.001	0.005	
* Barium, Total	9/5/19 10:39	9/9/19 14:47		5.075	1.96	mg/L	0.01015	0.05075	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:21		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:21		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:21		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:21		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:21		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:21		1.015	0.00504	mg/L	0.002	0.01	J
* Selenium, Total	9/5/19 10:39	9/5/19 18:21		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:21		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 12:14		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	200	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:16	9/5/19 13:16		1	2.39	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:08	9/5/19 16:08		1	0.330	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:53	9/9/19 14:53		1	4.82	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 13:14	9/4/19 13:14			360.26	uS/cm			FA
pH	9/4/19 13:14	9/4/19 13:14			7.40	SU			FA
Temperature	9/4/19 13:14	9/4/19 13:14			22.40	C			FA
Turbidity	9/4/19 13:14	9/4/19 13:14			0.11	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 13:17

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-1

**Laboratory ID Number:** AZ20021

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 13:17  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-1

**Laboratory ID Number:** AZ20021

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-2

**Location Code:** WMWGASG  
**Collected:** 9/4/19 09:30  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20022

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:03		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 12:10		10.15	89.8	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 10:03		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:23		1.015	0.0325	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:23		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 12:17		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	297	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 13:17	9/5/19 13:17		1	3.56	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:09	9/5/19 16:09		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 14:54	9/9/19 14:54		1	9.25	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 09:24	9/4/19 09:24			519.09	uS/cm			FA
pH	9/4/19 09:24	9/4/19 09:24			7.16	SU			FA
Temperature	9/4/19 09:24	9/4/19 09:24			22.88	C			FA
Turbidity	9/4/19 09:24	9/4/19 09:24			3.51	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 09:30

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-2

**Laboratory ID Number:** AZ20022

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20022	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.216	0.217	0.196	0.17 to 0.23	108	70 to 130	0.468	20
AZ20022	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.101	0.102	0.103	0.085 to 0.115	101	70 to 130	1.38	20
AZ20022	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.104	0.100	0.085 to 0.115	100	70 to 130	3.36	20
AZ20022	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.110	0.111	0.107	0.085 to 0.115	110	70 to 130	1.17	20
AZ20022	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.582	20
AZ20022	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.0996	0.0999	0.100	0.085 to 0.115	99.6	70 to 130	0.309	20
AZ20022	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.00	1.01	0.990	0.85 to 1.15	100	70 to 130	0.342	20
AZ20022	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.102	0.105	0.0999	0.085 to 0.115	102	70 to 130	2.48	20
AZ20022	Calcium, Total	mg/L	-0.00196	0.1518	5.00	94.2	94.1	5.15	4.25 to 5.75	87.1	70 to 130	0.0702	20
AZ20022	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.0996	0.101	0.0998	0.085 to 0.115	99.6	70 to 130	1.58	20
AZ20022	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00388	0.00402	0.0039	0.0034 to 0.0046	97.0	70 to 130	3.54	20
AZ20022	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.111	0.113	0.108	0.085 to 0.115	111	70 to 130	2.04	20
AZ20022	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.145	0.145	0.112	0.085 to 0.115	112	70 to 130	0.621	20
AZ20022	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.107	0.110	0.108	0.085 to 0.115	107	70 to 130	2.33	20
AZ20022	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.105	0.110	0.105	0.085 to 0.115	105	70 to 130	4.73	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 09:30  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-2

**Laboratory ID Number:** AZ20022

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20022	Sulfate	mg/L	-0.398	0.50	20.0	27.8	9.22	19.3	18 to 22	92.8	80 to 120	0.325	20
AZ20022	Fluoride	mg/L	0.0288	0.05	2.50	2.56	0.0355	2.59	2.25 to 2.75	102	80 to 120	0.00	20
AZ20022	Chloride	mg/L	0.0928	0.50	10.0	13.7	3.59	9.95	9 to 11	101	80 to 120	0.839	20
AZ20022	Solids, Dissolved	mg/L	-1.00	25			297	50.0	40 to 60			0.00	5

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-2 DUP

**Location Code:** WMWGASG  
**Collected:** 9/4/19 09:30  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20023

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:17		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 12:25		10.15	90.4	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 10:17		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:39		1.015	0.0332	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:39		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 13:45		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	298	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 14:54	9/5/19 14:54		1	3.60	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:21	9/5/19 16:21		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 15:09	9/9/19 15:09		1	9.21	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 09:24	9/4/19 09:24			519.09	uS/cm			FA
pH	9/4/19 09:24	9/4/19 09:24			7.16	SU			FA
Temperature	9/4/19 09:24	9/4/19 09:24			22.88	C			FA
Turbidity	9/4/19 09:24	9/4/19 09:24			3.51	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 09:30

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-2 DUP

**Laboratory ID Number:** AZ20023

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MSD							
AZ20031	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.110	0.109	0.085 to 0.115	110	70 to 130	0.536	20	
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	20
AZ20031	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 09:30  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-2 DUP

**Laboratory ID Number:** AZ20023

Sample	Analysis	Units	MB	Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-14S

**Location Code:** WMWGASG  
**Collected:** 9/4/19 11:00  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20024

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:20		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 12:28		10.15	47.4	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 10:20		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:42		1.015	0.0303	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:42		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 13:48		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	195	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 14:56	9/5/19 14:56		1	2.88	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:22	9/5/19 16:22		1	0.0703	mg/L	0.05	0.1	J
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 15:10	9/9/19 15:10		1	6.37	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 10:55	9/4/19 10:55			349.88	uS/cm			FA
pH	9/4/19 10:55	9/4/19 10:55			7.45	SU			FA
Temperature	9/4/19 10:55	9/4/19 10:55			20.91	C			FA
Turbidity	9/4/19 10:55	9/4/19 10:55			4.87	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 11:00

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-14S

**Laboratory ID Number:** AZ20024

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MSD							
AZ20031	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.110	0.109	0.085 to 0.115	110	70 to 130	0.536	20	
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	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, 2018

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 11:00  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-14S

**Laboratory ID Number:** AZ20024

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	20

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-3

**Location Code:** WMWGASG  
**Collected:** 9/4/19 12:45  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20025

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:23		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 12:31		10.15	76.4	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 10:23		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:45		1.015	0.0358	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:45		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 13:50		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	225	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 14:57	9/5/19 14:57		1	2.92	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:23	9/5/19 16:23		1	0.0594	mg/L	0.05	0.1	J
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 15:12	9/9/19 15:12		1	10.9	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 12:42	9/4/19 12:42			408.80	uS/cm			FA
pH	9/4/19 12:42	9/4/19 12:42			6.71	SU			FA
Temperature	9/4/19 12:42	9/4/19 12:42			26.10	C			FA
Turbidity	9/4/19 12:42	9/4/19 12:42			3.81	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 12:45

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-3

**Laboratory ID Number:** AZ20025

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MSD							
AZ20031	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.110	0.109	0.085 to 0.115	110	70 to 130	0.536	20	
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 12:45  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-3

**Laboratory ID Number:** AZ20025

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	20

---

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum Field Blank

**Location Code:** WMWGASGFB  
**Collected:** 9/4/19 13:30  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20026

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:26		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 10:26		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	9/5/19 11:15	9/6/19 10:26		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:47		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 13:52		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 14:58	9/5/19 14:58		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:24	9/5/19 16:24		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 15:13	9/9/19 15:13		1	Not Detected	mg/L	0.50	1	U

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASGFB  
**Sample Date:** 9/4/19 13:30  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum Field Blank

**Laboratory ID Number:** AZ20026

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20031	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.110	0.109	0.108	0.085 to 0.115	110	70 to 130	0.536	20
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	20
AZ20031	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASGFB

**Sample Date:** 9/4/19 13:30

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum Field Blank

**Laboratory ID Number:** AZ20026

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-15

**Location Code:** WMWGASG  
**Collected:** 9/4/19 14:00  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20027

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:29		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 10:29		1.015	6.07	mg/L	0.1	0.5	
* Lithium, Total	9/5/19 11:15	9/6/19 10:29		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:50		1.015	0.00964	mg/L	0.002	0.01	J
* Beryllium, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:50		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 13:55		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	28.0	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 14:59	9/5/19 14:59		1	1.95	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:26	9/5/19 16:26		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 15:14	9/9/19 15:14		1	2.30	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 13:54	9/4/19 13:54			41.55	uS/cm			FA
pH	9/4/19 13:54	9/4/19 13:54			5.67	SU			FA
Temperature	9/4/19 13:54	9/4/19 13:54			24.02	C			FA
Turbidity	9/4/19 13:54	9/4/19 13:54			4.46	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 14:00  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-15

**Laboratory ID Number:** AZ20027

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Cadmium, Total	mg/L	0.000000000	0.0001474	0.10	0.110	0.109	0.108	0.085 to 0.115	110	70 to 130	0.536	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	20
AZ20031	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 14:00  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum - MW-15

**Laboratory ID Number:** AZ20027

Sample	Analysis	Units	MB	Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum Equipment Blank

**Location Code:** WMWGASGEB  
**Collected:** 9/4/19 14:30  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:05

**Laboratory ID Number:** AZ20028

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
<b>Analyst: RDA</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:32		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 10:32		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	9/5/19 11:15	9/6/19 10:32		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
<b>Analyst: DLJ</b>									
<b>Preparation Method: EPA 1638</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:53		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
<b>Analyst: GAS</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 13:57		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
<b>Analyst: TJW</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500CI E</b>									
<b>Analyst: JCC</b>									
* Chloride	9/5/19 15:00	9/5/19 15:00		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>									
<b>Analyst: JCC</b>									
* Fluoride	9/5/19 16:27	9/5/19 16:27		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
<b>Analyst: JCC</b>									
* Sulfate	9/9/19 15:15	9/9/19 15:15		1	Not Detected	mg/L	0.50	1	U

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASGEB

**Sample Date:** 9/4/19 14:30

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum Equipment Blank

**Laboratory ID Number:** AZ20028

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20031	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.110	0.109	0.108	0.085 to 0.115	110	70 to 130	0.536	20
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	20
AZ20031	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	20

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASGEB

**Sample Date:** 9/4/19 14:30

**Customer ID:**

**Delivery Date:** 9/5/19 09:05

**Description:** Gaston Gypsum Equipment Blank

**Laboratory ID Number:** AZ20028

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	20

---

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-5

**Location Code:** WMWGASG  
**Collected:** 9/4/19 09:39  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:06

**Laboratory ID Number:** AZ20029

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:35		1.015	0.0641	mg/L	0.03	0.1	J
* Calcium, Total	9/5/19 11:15	9/6/19 12:34		10.15	57.9	mg/L	1.015	5.075	
* Lithium, Total	9/5/19 11:15	9/6/19 10:35		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:55		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:55		1.015	0.00305	mg/L	0.001	0.005	J
* Barium, Total	9/5/19 10:39	9/5/19 18:55		1.015	0.0824	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:55		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:55		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:55		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:55		1.015	0.00527	mg/L	0.002	0.005	
* Lead, Total	9/5/19 10:39	9/5/19 18:55		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:55		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:55		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:55		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 13:59		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	388	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 15:02	9/5/19 15:02		1	11.9	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:28	9/5/19 16:28		1	0.0962	mg/L	0.05	0.1	J
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 15:16	9/9/19 15:16		4	56.3	mg/L	2.00	4	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 09:34	9/4/19 09:34			684.58	uS/cm			FA
pH	9/4/19 09:34	9/4/19 09:34			6.81	SU			FA
Temperature	9/4/19 09:34	9/4/19 09:34			21.64	C			FA
Turbidity	9/4/19 09:34	9/4/19 09:34			0.55	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 09:39

**Customer ID:**

**Delivery Date:** 9/5/19 09:06

**Description:** Gaston Gypsum - MW-5

**Laboratory ID Number:** AZ20029

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MSD							
AZ20031	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.110	0.109	0.108	0.085 to 0.115	110	70 to 130	0.536	20
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 09:39  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:06

**Description:** Gaston Gypsum - MW-5

**Laboratory ID Number:** AZ20029

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	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

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-6

**Location Code:** WMWGASG  
**Collected:** 9/4/19 10:49  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:06

**Laboratory ID Number:** AZ20030

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:38		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 10:38		1.015	0.872	mg/L	0.1	0.5	
* Lithium, Total	9/5/19 11:15	9/6/19 10:38		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 18:58		1.015	0.0176	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 18:58		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 14:02		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 15:03	9/5/19 15:03		1	3.21	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:29	9/5/19 16:29		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 15:18	9/9/19 15:18		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 10:44	9/4/19 10:44			29.74	uS/cm			FA
pH	9/4/19 10:44	9/4/19 10:44			4.59	SU			FA
Temperature	9/4/19 10:44	9/4/19 10:44			21.05	C			FA
Turbidity	9/4/19 10:44	9/4/19 10:44			0.51	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 10:49

**Customer ID:**

**Delivery Date:** 9/5/19 09:06

**Description:** Gaston Gypsum - MW-6

**Laboratory ID Number:** AZ20030

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MSD							
AZ20031	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.110	0.109	0.085 to 0.115	110	70 to 130	0.536	20	
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Barium, Total	mg/L	-0.00000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 10:49  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:06

**Description:** Gaston Gypsum - MW-6

**Laboratory ID Number:** AZ20030

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	20

---

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

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

# Certificate Of Analysis

## Revised Copy

**Description:** Gaston Gypsum - MW-7

**Location Code:** WMWGASG  
**Collected:** 9/4/19 13:00  
**Customer ID:**  
**Submittal Date:** 9/5/19 09:06

**Laboratory ID Number:** AZ20031

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>									
* Boron, Total	9/5/19 11:15	9/6/19 10:41		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/5/19 11:15	9/6/19 12:37		10.15	72.0	mg/L	1.015	5.075	RA
* Lithium, Total	9/5/19 11:15	9/6/19 10:41		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>									
* Antimony, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/5/19 10:39	9/5/19 19:01		1.015	0.0256	mg/L	0.002	0.01	
* Beryllium, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/5/19 10:39	9/5/19 19:01		1.015	0.00217	mg/L	0.002	0.005	J
* Lead, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/5/19 10:39	9/5/19 19:01		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>									
* Mercury, Total by CVAA	9/10/19 09:45	9/11/19 14:04		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>									
* Solids, Dissolved	9/6/19 14:35	9/9/19 14:35		1	233	mg/L		25	
<b>Analytical Method: SM4500CI E</b>									
* Chloride	9/5/19 15:04	9/5/19 15:04		1	4.31	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>									
* Fluoride	9/5/19 16:31	9/5/19 16:31		1	0.0700	mg/L	0.05	0.1	J
<b>Analytical Method: SM4500SO4 E</b>									
* Sulfate	9/9/19 15:19	9/9/19 15:19		1	10.1	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>									
Conductivity	9/4/19 12:55	9/4/19 12:55			369.04	uS/cm			FA
pH	9/4/19 12:55	9/4/19 12:55			6.78	SU			FA
Temperature	9/4/19 12:55	9/4/19 12:55			25.62	C			FA
Turbidity	9/4/19 12:55	9/4/19 12:55			0.5	NTU			FA

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

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

Recovery for Calcium is out of spec. Spike amount is less than 30% of the sample amount. The precision for Fluoride is out of specification limit. However, the sample and duplicate are less than the RL. LBM 9/30/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG

**Sample Date:** 9/4/19 13:00

**Customer ID:**

**Delivery Date:** 9/5/19 09:06

**Description:** Gaston Gypsum - MW-7

**Laboratory ID Number:** AZ20031

Sample	Analysis	Units	MB				Standard	Limit	Rec	Limit	Prec	Limit	
			MB	Limit	Spike	MS							
AZ20031	Boron, Total	mg/L	0.00226	0.0650254	1.00	1.02	1.03	0.990	0.85 to 1.15	102	70 to 130	1.56	20
AZ20031	Cadmium, Total	mg/L	0.00000000	0.0001474	0.10	0.110	0.109	0.108	0.085 to 0.115	110	70 to 130	0.536	20
AZ20031	Calcium, Total	mg/L	-0.00196	0.1518	5.00	76.0	73.6	5.15	4.25 to 5.75	80.0	70 to 130	3.16	20
AZ20031	Mercury, Total by CVAA	mg/L	0.00000432	0.0005	0.004	0.00385	0.00393	0.00426	0.0034 to 0.0046	96.2	70 to 130	2.09	20
AZ20031	Beryllium, Total	mg/L	0.00000797	0.00088	0.10	0.100	0.102	0.100	0.085 to 0.115	100	70 to 130	1.59	20
AZ20031	Lead, Total	mg/L	0.00000325	0.0001474	0.10	0.111	0.110	0.107	0.085 to 0.115	111	70 to 130	0.0196	20
AZ20031	Arsenic, Total	mg/L	0.00000720	0.0001474	0.10	0.102	0.0990	0.100	0.085 to 0.115	102	70 to 130	3.36	20
AZ20031	Cobalt, Total	mg/L	-0.00000085	0.0001474	0.10	0.106	0.104	0.103	0.085 to 0.115	104	70 to 130	1.72	20
AZ20031	Lithium, Total	mg/L	-0.00000760	0.0154	0.20	0.218	0.222	0.196	0.17 to 0.23	109	70 to 130	1.86	20
AZ20031	Barium, Total	mg/L	-0.0000139	0.0002	0.10	0.137	0.138	0.112	0.085 to 0.115	111	70 to 130	0.602	20
AZ20031	Molybdenum, Total	mg/L	0.00000873	0.0001474	0.10	0.105	0.105	0.0999	0.085 to 0.115	105	70 to 130	0.132	20
AZ20031	Antimony, Total	mg/L	0.000230	0.00066	0.10	0.113	0.112	0.105	0.085 to 0.115	113	70 to 130	0.978	20
AZ20031	Thallium, Total	mg/L	0.00000546	0.0001474	0.10	0.112	0.111	0.108	0.085 to 0.115	112	70 to 130	1.05	20
AZ20031	Chromium, Total	mg/L	-0.0000539	0.00044	0.10	0.102	0.101	0.0998	0.085 to 0.115	102	70 to 130	1.12	20
AZ20031	Selenium, Total	mg/L	-0.0000225	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	2.46	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, 2018

**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to "Standard" and "Standard Limit". LBM 10/31/19

Recovery for Calcium is out of spec. Spike amount is less than 30% of the sample amount. The precision for Fluoride is out of specification limit. However, the sample and duplicate are less than the RL. LBM 9/30/19

## Batch QC Summary

### Revised Copy

**Customer Account:** WMWGASG  
**Sample Date:** 9/4/19 13:00  
**Customer ID:**  
**Delivery Date:** 9/5/19 09:06

**Description:** Gaston Gypsum - MW-7

**Laboratory ID Number:** AZ20031

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Prec Limit
AZ20031	Chloride	mg/L	0.00467	0.50	10.0	14.7	4.30	10.1	9 to 11	104	80 to 120	0.232	20
AZ20031	Solids, Dissolved	mg/L	-1.00	25			233	50.0	40 to 60			0.00	5
AZ20031	Fluoride	mg/L	0.0216	0.05	2.50	2.67	0.0866	2.55	2.25 to 2.75	104	80 to 120	21.2	20
AZ20031	Sulfate	mg/L	-0.30	0.50	20.0	28.7	10.1	19.1	18 to 22	93.0	80 to 120	0.00	20

---

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Laboratory certification ID: E571114

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**Comments:** Revised Copy: Revising QC Batch Summary pages for TDS recovery information. Also, updating "LCS" and "LCS Limit" columns to

"Standard" and "Standard Limit". LBM 10/31/19

Recovery for Calcium is out of spec. Spike amount is less than 30% of the sample amount. The precision for Fluoride is out of specification limit. However, the sample and duplicate are less than the RL. LBM 9/30/19

## Definitions

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

Qualifier	Description
FA	Field results were reviewed by the Water Field Group.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.



# Chain of Custody Groundwater

## APC General Testing Laboratory

- Field Complete
- Lab Complete

Outside Lab

Lab ETA

JOURNAL OF CLIMATE

## Relinquished By

Received By

Date/Time

*Allen Gatz*

Laura Miller

09/05/2019 07:12

SmarTroll ID	7586-41443-5-2
Turbidity ID	7081-38476-1-1
Sample Event	1238

All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Cooler Temp	0.3 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7268-39374-6-6



# Chain of Custody Groundwater

## APC General Testing Laboratory

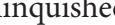
✓ Field Complete

✓ Lab Complete

## Outside Lab

Lab ETA | 09/05/2019 07:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer, Lauren Parker																									
Site Representative	Tanisha Fenderson	Requested By	Lauren Parker																									
Collector	Anthony Goggins	Location	Gaston Gypsum																									
Bottles	<table border="1"> <tr> <td>1</td> <td>Metals</td> <td>500 mL</td> </tr> <tr> <td>2</td> <td>Hg</td> <td>250 mL</td> </tr> </table>	1	Metals	500 mL	2	Hg	250 mL	<table border="1"> <tr> <td>3</td> <td>TDS</td> <td>500 mL</td> </tr> <tr> <td>4</td> <td>Anions</td> <td>250 mL</td> </tr> </table>	3	TDS	500 mL	4	Anions	250 mL	<table border="1"> <tr> <td>5</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>6</td> <td>N/A</td> <td>N/A</td> </tr> </table>	5	N/A	N/A	6	N/A	N/A	<table border="1"> <tr> <td>7</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>8</td> <td>N/A</td> <td>N/A</td> </tr> </table>	7	N/A	N/A	8	N/A	N/A
1	Metals	500 mL																										
2	Hg	250 mL																										
3	TDS	500 mL																										
4	Anions	250 mL																										
5	N/A	N/A																										
6	N/A	N/A																										
7	N/A	N/A																										
8	N/A	N/A																										
Comments																												

Relinquished By	Received By	Date/Time
		09/05/2019 07:48

SmarTroll ID	7586-41442-5-1
Turbidity ID	5160-26211-1-1
Sample Event	1238

All metals and radiological bottles have pH < 2

Cooler Temp 0.2 degree C

Thermometer JP 5408-27568-2-2

pH Strip ID 7267-39374-6-6



# Chain of Custody Groundwater

## APC General Testing Laboratory

- Field Complete
- Lab Complete

Outside Lab

Lab ETA

Requested Complete Date		Routine		Results To		Dustin Brooks, Greg Dyer, Lauren Parker						
Site Representative		Tanisha Fenderson		Requested By		Lauren Parker						
Collector		TJ Daugherty		Location		Gaston Gypsum						
Bottles	1	Metals	500 mL	3	TDS	500 mL	5	N/A	N/A	7	N/A	N/A
	2	Hg	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A
Comments		MW-8 time corrected to 11:03. LBM 9/5/19										

## Relinquished By

Received By

### Date/Time

4/16

*Ryan Maliff*

09/05/2019 07:15

SmarTroll ID	7586-41445-5-4
Turbidity ID	4677-23342-4-1
Sample Event	1238

All metals and radiological bottles have pH < 2 ✓

Cooler Temp	0.3 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7267-39374-6-6





# Chain of Custody Groundwater

## APC General Testing Laboratory

- Field Complete
- Lab Complete

Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer, Lauren Parker			
Site Representative	Tanisha Fenderson	Requested By	Lauren Parker			
Collector	TJ Daugherty	Location	Gaston Gypsum			
Bottles	1 Radium 2	1 L 4	3 5 N/A 6 N/A	N/A N/A	7 N/A 8 N/A	N/A N/A
Comments	Rad Dup collected @ MW-8					

## Relinquished By

Received By

### Date/Time

4/16

*Lynn Maliff*

09/05/2019 07:15

SmarTroll ID	7586-41445-5-4
Turbidity ID	4677-23342-4-1
Sample Event	1238

All metals and radiological bottles have pH < 2

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7267-39374-6-6



# Chain of Custody Groundwater

## APC General Testing Laboratory

- Field Complete
- Lab Complete

Outside Lab

Lab ETA | 09/05/2019 07:00

Requested Complete Date		Routine		Results To		Dustin Brooks, Greg Dyer, Lauren Parker						
Site Representative		Tanisha Fenderson		Requested By		Lauren Parker						
Collector		Anthony Goggins				Location		Gaston 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											

Relinquished By	Received By	Date/Time
		09/05/2019 07:49

SmarTroll ID	7586-41442-5-1
Turbidity ID	5160-26211-1-1
Sample Event	1238

All metals and radiological bottles have pH < 2 ✓

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7267-39374-6-6



## ANALYTICAL REPORT

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

Laboratory Job ID: 400-175908-1

Laboratory Sample Delivery Group: Gaston Gypsum 1238  
Client Project/Site: CCR Plant Gaston

For:

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

Attn: Laura Midkiff



Authorized for release by:  
10/15/2019 4:21:25 PM

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

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	4
Sample Summary . . . . .	5
Client Sample Results . . . . .	6
Definitions . . . . .	25
Chronicle . . . . .	26
QC Association . . . . .	31
QC Sample Results . . . . .	32
Chain of Custody . . . . .	34
Receipt Checklists . . . . .	37
Certification Summary . . . . .	39

# Case Narrative

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

Job ID: 400-175908-1  
SDG: Gaston Gypsum 1238

## Job ID: 400-175908-1

Laboratory: Eurofins TestAmerica, Pensacola

### Narrative

#### Job Narrative 400-175908-1

##### RAD

Method 9315: Radium-226 Prep batch 160-443011. 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. AZ20032 MW-8 (400-175908-1), AZ20032 MW-8 (400-175908-1[DU]), AZ20033 MW-9 (400-175908-2), AZ20034 MW-10 (400-175908-3), AZ20035 MW-11 (400-175908-4), AZ20036 FB-1 (400-175908-5), AZ20037 MW-12 (400-175908-6), AZ20038 MW-12 DUP (400-175908-7), AZ20039 MW-13 (400-175908-8), AZ20040 MW-1 (400-175908-9), AZ20041 MW-2 (400-175908-10), AZ20042 MW-2 DUP (400-175908-11), AZ20043 MW-14S (400-175908-12), AZ20044 MW-3 (400-175908-13), AZ20045 FB-2 (400-175908-14), AZ20046 MW-15 (400-175908-15), AZ20047 EB-1 (400-175908-16), AZ20048 MW-5 (400-175908-17), AZ20049 MW-6 (400-175908-18), AZ20050 MW-7 (400-175908-19), (LCS 160-443011/1-A) and (MB 160-443011/22-A)

Method 9320: Radium-228 Prep Batch 160-443015. 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. AZ20032 MW-8 (400-175908-1), AZ20032 MW-8 (400-175908-1[DU]), AZ20033 MW-9 (400-175908-2), AZ20034 MW-10 (400-175908-3), AZ20035 MW-11 (400-175908-4), AZ20036 FB-1 (400-175908-5), AZ20037 MW-12 (400-175908-6), AZ20038 MW-12 DUP (400-175908-7), AZ20039 MW-13 (400-175908-8), AZ20040 MW-1 (400-175908-9), AZ20041 MW-2 (400-175908-10), AZ20042 MW-2 DUP (400-175908-11), AZ20043 MW-14S (400-175908-12), AZ20044 MW-3 (400-175908-13), AZ20045 FB-2 (400-175908-14), AZ20046 MW-15 (400-175908-15), AZ20047 EB-1 (400-175908-16), AZ20048 MW-5 (400-175908-17), AZ20049 MW-6 (400-175908-18), AZ20050 MW-7 (400-175908-19), (LCS 160-443015/1-A) and (MB 160-443015/22-A)

Method PrecSep\_0: Radium 228 Prep batch 160-443015. The following samples were prepared at a reduced aliquot due to insufficient volume: AZ20032 MW-8 (400-175908-1), AZ20032 MW-8 (400-175908-1[DU]), AZ20033 MW-9 (400-175908-2), AZ20034 MW-10 (400-175908-3), AZ20035 MW-11 (400-175908-4), AZ20036 FB-1 (400-175908-5), AZ20037 MW-12 (400-175908-6), AZ20038 MW-12 DUP (400-175908-7), AZ20039 MW-13 (400-175908-8), AZ20040 MW-1 (400-175908-9), AZ20041 MW-2 (400-175908-10), AZ20042 MW-2 DUP (400-175908-11), AZ20043 MW-14S (400-175908-12), AZ20044 MW-3 (400-175908-13), AZ20045 FB-2 (400-175908-14), AZ20046 MW-15 (400-175908-15), AZ20047 EB-1 (400-175908-16), AZ20048 MW-5 (400-175908-17), AZ20049 MW-6 (400-175908-18) and AZ20050 MW-7 (400-175908-19).

Method PrecSep-21: Radium 226 Prep Batch 160-443011. The following samples were prepared at a reduced aliquot due to insufficient volume: AZ20032 MW-8 (400-175908-1), AZ20032 MW-8 (400-175908-1[DU]), AZ20033 MW-9 (400-175908-2), AZ20034 MW-10 (400-175908-3), AZ20035 MW-11 (400-175908-4), AZ20036 FB-1 (400-175908-5), AZ20037 MW-12 (400-175908-6), AZ20038 MW-12 DUP (400-175908-7), AZ20039 MW-13 (400-175908-8), AZ20040 MW-1 (400-175908-9), AZ20041 MW-2 (400-175908-10), AZ20042 MW-2 DUP (400-175908-11), AZ20043 MW-14S (400-175908-12), AZ20044 MW-3 (400-175908-13), AZ20045 FB-2 (400-175908-14), AZ20046 MW-15 (400-175908-15), AZ20047 EB-1 (400-175908-16), AZ20048 MW-5 (400-175908-17), AZ20049 MW-6 (400-175908-18) and AZ20050 MW-7 (400-175908-19).

# Method Summary

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

Job ID: 400-175908-1  
SDG: Gaston Gypsum 1238

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

## Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

## Laboratory References:

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

# Sample Summary

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-175908-1	AZ20032 MW-8	Water	09/03/19 11:03	09/06/19 13:56	
400-175908-2	AZ20033 MW-9	Water	09/03/19 12:35	09/06/19 13:56	
400-175908-3	AZ20034 MW-10	Water	09/03/19 14:00	09/06/19 13:56	
400-175908-4	AZ20035 MW-11	Water	09/03/19 15:35	09/06/19 13:56	
400-175908-5	AZ20036 FB-1	Water	09/03/19 15:50	09/06/19 13:56	
400-175908-6	AZ20037 MW-12	Water	09/04/19 10:00	09/06/19 13:56	
400-175908-7	AZ20038 MW-12 DUP	Water	09/04/19 10:00	09/06/19 13:56	
400-175908-8	AZ20039 MW-13	Water	09/04/19 11:55	09/06/19 13:56	
400-175908-9	AZ20040 MW-1	Water	09/04/19 13:17	09/06/19 13:56	
400-175908-10	AZ20041 MW-2	Water	09/04/19 09:30	09/06/19 13:56	
400-175908-11	AZ20042 MW-2 DUP	Water	09/04/19 09:30	09/06/19 13:56	
400-175908-12	AZ20043 MW-14S	Water	09/04/19 11:00	09/06/19 13:56	
400-175908-13	AZ20044 MW-3	Water	09/04/19 12:45	09/06/19 13:56	
400-175908-14	AZ20045 FB-2	Water	09/04/19 13:30	09/06/19 13:56	
400-175908-15	AZ20046 MW-15	Water	09/04/19 14:00	09/06/19 13:56	
400-175908-16	AZ20047 EB-1	Water	09/04/19 14:30	09/06/19 13:56	
400-175908-17	AZ20048 MW-5	Water	09/04/19 09:39	09/06/19 13:56	
400-175908-18	AZ20049 MW-6	Water	09/04/19 10:49	09/06/19 13:56	
400-175908-19	AZ20050 MW-7	Water	09/04/19 13:00	09/06/19 13:56	

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20032 MW-8**

**Lab Sample ID: 400-175908-1**

**Matrix: Water**

Date Collected: 09/03/19 11:03  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.153		0.0981	0.0990	1.00	0.134	pCi/L	09/16/19 15:47	10/10/19 13:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					09/16/19 15:47	10/10/19 13:14	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.830		0.346	0.355	1.00	0.491	pCi/L	09/16/19 17:41	09/26/19 08:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					09/16/19 17:41	09/26/19 08:31	1
Y Carrier	86.7		40 - 110					09/16/19 17:41	09/26/19 08:31	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.983		0.360	0.369	5.00	0.491	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20033 MW-9**

**Lab Sample ID: 400-175908-2**

**Matrix: Water**

Date Collected: 09/03/19 12:35  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.109	U	0.0947	0.0952	1.00	0.145	pCi/L	09/16/19 15:47	10/10/19 13:14	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	94.6		40 - 110					09/16/19 15:47	10/10/19 13:14	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.885		0.338	0.348	1.00	0.468	pCi/L	09/16/19 17:41	09/26/19 08:32	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	94.6		40 - 110					09/16/19 17:41	09/26/19 08:32	1
Y Carrier	88.6		40 - 110					09/16/19 17:41	09/26/19 08:32	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.994		0.351	0.361	5.00	0.468	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20034 MW-10**

**Lab Sample ID: 400-175908-3**

**Matrix: Water**

Date Collected: 09/03/19 14:00  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.207		0.102	0.104	1.00	0.119	pCi/L	09/16/19 15:47	10/10/19 13:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					09/16/19 15:47	10/10/19 13:15	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.585		0.325	0.329	1.00	0.485	pCi/L	09/16/19 17:41	09/26/19 08:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					09/16/19 17:41	09/26/19 08:35	1
Y Carrier	86.4		40 - 110					09/16/19 17:41	09/26/19 08:35	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.793		0.341	0.345	5.00	0.485	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20035 MW-11**

**Lab Sample ID: 400-175908-4**

Matrix: Water

Date Collected: 09/03/19 15:35  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0998	U	0.0923	0.0927	1.00	0.144	pCi/L	09/16/19 15:47	10/10/19 13:15	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	98.9		40 - 110					09/16/19 15:47	10/10/19 13:15	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	3.37		0.497	0.586	1.00	0.481	pCi/L	09/16/19 17:41	09/26/19 08:32	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	98.9		40 - 110					09/16/19 17:41	09/26/19 08:32	1
Y Carrier	86.4		40 - 110					09/16/19 17:41	09/26/19 08:32	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	3.47		0.505	0.593	5.00	0.481	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20036 FB-1**

**Lab Sample ID: 400-175908-5**

**Matrix: Water**

Date Collected: 09/03/19 15:50  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.141	U	0.102	0.103	1.00	0.147	pCi/L	09/16/19 15:47	10/10/19 13:16	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	96.9		40 - 110					09/16/19 15:47	10/10/19 13:16	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	2.45		0.458	0.510	1.00	0.497	pCi/L	09/16/19 17:41	09/26/19 08:32	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	96.9		40 - 110					09/16/19 17:41	09/26/19 08:32	1
Y Carrier	85.6		40 - 110					09/16/19 17:41	09/26/19 08:32	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	2.59		0.469	0.520	5.00	0.497	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20037 MW-12**

**Lab Sample ID: 400-175908-6**

**Matrix: Water**

Date Collected: 09/04/19 10:00  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.114	U	0.0978	0.0983	1.00	0.149	pCi/L	09/16/19 15:47	10/10/19 13:16	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					09/16/19 15:47	10/10/19 13:16	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.420	U	0.325	0.327	1.00	0.514	pCi/L	09/16/19 17:41	09/26/19 08:32	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					09/16/19 17:41	09/26/19 08:32	1
Y Carrier	85.2		40 - 110					09/16/19 17:41	09/26/19 08:32	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.534		0.339	0.341	5.00	0.514	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20038 MW-12 DUP**

**Lab Sample ID: 400-175908-7**

**Matrix: Water**

Date Collected: 09/04/19 10:00  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0160	U	0.0688	0.0688	1.00	0.145	pCi/L	09/16/19 15:47	10/10/19 07:12	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					09/16/19 15:47	10/10/19 07:12	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.00		0.324	0.336	1.00	0.418	pCi/L	09/16/19 17:41	09/26/19 08:32	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					09/16/19 17:41	09/26/19 08:32	1
Y Carrier	89.0		40 - 110					09/16/19 17:41	09/26/19 08:32	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.988		0.331	0.343	5.00	0.418	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20039 MW-13**

**Lab Sample ID: 400-175908-8**

**Matrix: Water**

Date Collected: 09/04/19 11:55  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0225	U	0.0818	0.0818	1.00	0.153	pCi/L	09/16/19 15:47	10/10/19 07:12	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.4		40 - 110					09/16/19 15:47	10/10/19 07:12	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	3.90		0.555	0.660	1.00	0.521	pCi/L	09/16/19 17:41	09/26/19 08:36	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.4		40 - 110					09/16/19 17:41	09/26/19 08:36	1
Y Carrier	86.4		40 - 110					09/16/19 17:41	09/26/19 08:36	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	3.92		0.561	0.665	5.00	0.521	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20040 MW-1**

**Lab Sample ID: 400-175908-9**

**Matrix: Water**

Date Collected: 09/04/19 13:17  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.446		0.141	0.147	1.00	0.148	pCi/L	09/16/19 15:47	10/10/19 07:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					09/16/19 15:47	10/10/19 07:12	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.95		0.393	0.432	1.00	0.445	pCi/L	09/16/19 17:41	09/26/19 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					09/16/19 17:41	09/26/19 08:32	1
Y Carrier	88.6		40 - 110					09/16/19 17:41	09/26/19 08:32	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	2.39		0.418	0.456	5.00	0.445	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20041 MW-2**

**Lab Sample ID: 400-175908-10**

**Matrix: Water**

Date Collected: 09/04/19 09:30  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.161		0.103	0.105	1.00	0.141	pCi/L	09/16/19 15:47	10/10/19 07:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					09/16/19 15:47	10/10/19 07:12	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.186	U	0.281	0.282	1.00	0.474	pCi/L	09/16/19 17:41	09/26/19 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					09/16/19 17:41	09/26/19 08:32	1
Y Carrier	87.9		40 - 110					09/16/19 17:41	09/26/19 08:32	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.347	U	0.299	0.301	5.00	0.474	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20042 MW-2 DUP**

**Lab Sample ID: 400-175908-11**

**Matrix: Water**

Date Collected: 09/04/19 09:30

Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0237	U	0.0799	0.0799	1.00	0.149	pCi/L	09/16/19 15:47	10/10/19 07:13	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.8		40 - 110					09/16/19 15:47	10/10/19 07:13	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.394	U	0.319	0.321	1.00	0.506	pCi/L	09/16/19 17:41	09/26/19 08:33	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.8		40 - 110					09/16/19 17:41	09/26/19 08:33	1
Y Carrier	86.0		40 - 110					09/16/19 17:41	09/26/19 08:33	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.418	U	0.329	0.331	5.00	0.506	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20043 MW-14S**

**Lab Sample ID: 400-175908-12**

**Matrix: Water**

Date Collected: 09/04/19 11:00  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.141		0.0880	0.0889	1.00	0.115	pCi/L	09/16/19 15:47	10/10/19 07:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.5		40 - 110					09/16/19 15:47	10/10/19 07:13	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.88		0.419	0.453	1.00	0.497	pCi/L	09/16/19 17:41	09/26/19 08:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.5		40 - 110					09/16/19 17:41	09/26/19 08:33	1
Y Carrier	87.5		40 - 110					09/16/19 17:41	09/26/19 08:33	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	2.02		0.428	0.462	5.00	0.497	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20044 MW-3**

**Lab Sample ID: 400-175908-13**

**Matrix: Water**

Date Collected: 09/04/19 12:45  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0677	U	0.0864	0.0866	1.00	0.144	pCi/L	09/16/19 15:47	10/10/19 07:13	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	98.0		40 - 110					09/16/19 15:47	10/10/19 07:13	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	2.29		0.437	0.485	1.00	0.473	pCi/L	09/16/19 17:41	09/26/19 08:35	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	98.0		40 - 110					09/16/19 17:41	09/26/19 08:35	1
Y Carrier	85.6		40 - 110					09/16/19 17:41	09/26/19 08:35	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	2.36		0.445	0.493	5.00	0.473	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20045 FB-2**

**Lab Sample ID: 400-175908-14**

**Matrix: Water**

Date Collected: 09/04/19 13:30  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0390	U	0.0885	0.0886	1.00	0.159	pCi/L	09/16/19 15:47	10/10/19 13:16	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	94.4		40 - 110					09/16/19 15:47	10/10/19 13:16	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.421	U	0.343	0.345	1.00	0.547	pCi/L	09/16/19 17:41	09/26/19 08:35	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	94.4		40 - 110					09/16/19 17:41	09/26/19 08:35	1
Y Carrier	85.6		40 - 110					09/16/19 17:41	09/26/19 08:35	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.460	U	0.354	0.356	5.00	0.547	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20046 MW-15**

**Lab Sample ID: 400-175908-15**

**Matrix: Water**

Date Collected: 09/04/19 14:00  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.142	U	0.104	0.105	1.00	0.152	pCi/L	09/16/19 15:47	10/10/19 16:50	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.7		40 - 110					09/16/19 15:47	10/10/19 16:50	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.915		0.351	0.361	1.00	0.481	pCi/L	09/16/19 17:41	09/26/19 08:36	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.7		40 - 110					09/16/19 17:41	09/26/19 08:36	1
Y Carrier	86.7		40 - 110					09/16/19 17:41	09/26/19 08:36	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.06		0.366	0.376	5.00	0.481	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20047 EB-1**

**Lab Sample ID: 400-175908-16**

**Matrix: Water**

Date Collected: 09/04/19 14:30  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0624	U	0.0843	0.0845	1.00	0.142	pCi/L	09/16/19 15:47	10/10/19 16:50	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	98.9		40 - 110					09/16/19 15:47	10/10/19 16:50	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.08		0.336	0.350	1.00	0.432	pCi/L	09/16/19 17:41	09/26/19 08:36	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	98.9		40 - 110					09/16/19 17:41	09/26/19 08:36	1
Y Carrier	87.5		40 - 110					09/16/19 17:41	09/26/19 08:36	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.14		0.346	0.360	5.00	0.432	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20048 MW-5**

**Lab Sample ID: 400-175908-17**

**Matrix: Water**

Date Collected: 09/04/19 09:39  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.248		0.121	0.123	1.00	0.155	pCi/L	09/16/19 15:47	10/10/19 16:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					09/16/19 15:47	10/10/19 16:50	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.798		0.332	0.340	1.00	0.469	pCi/L	09/16/19 17:41	09/26/19 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					09/16/19 17:41	09/26/19 08:36	1
Y Carrier	86.4		40 - 110					09/16/19 17:41	09/26/19 08:36	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.05		0.353	0.362	5.00	0.469	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20049 MW-6**

**Lab Sample ID: 400-175908-18**

**Matrix: Water**

Date Collected: 09/04/19 10:49  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0938	U	0.0879	0.0883	1.00	0.137	pCi/L	09/16/19 15:47	10/10/19 16:51	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	100		40 - 110					09/16/19 15:47	10/10/19 16:51	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.514		0.272	0.276	1.00	0.398	pCi/L	09/16/19 17:41	09/26/19 08:36	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	100		40 - 110					09/16/19 17:41	09/26/19 08:36	1
Y Carrier	87.9		40 - 110					09/16/19 17:41	09/26/19 08:36	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.608		0.286	0.290	5.00	0.398	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Client Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20050 MW-7**

**Lab Sample ID: 400-175908-19**

**Matrix: Water**

Date Collected: 09/04/19 13:00  
 Date Received: 09/06/19 13:56

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.128	U	0.0947	0.0954	1.00	0.136	pCi/L	09/16/19 15:47	10/10/19 16:51	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					09/16/19 15:47	10/10/19 16:51	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.15		0.376	0.391	1.00	0.490	pCi/L	09/16/19 17:41	09/26/19 08:36	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					09/16/19 17:41	09/26/19 08:36	1
Y Carrier	84.5		40 - 110					09/16/19 17:41	09/26/19 08:36	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.28		0.388	0.402	5.00	0.490	pCi/L		10/14/19 10:11	1

Eurofins TestAmerica, Pensacola

# Definitions/Glossary

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

Job ID: 400-175908-1  
SDG: Gaston Gypsum 1238

## Qualifiers

Rad Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Lab Chronicle

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20032 MW-8**

Date Collected: 09/03/19 11:03

Date Received: 09/06/19 13:56

**Lab Sample ID: 400-175908-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 13:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:31	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20033 MW-9**

Date Collected: 09/03/19 12:35

Date Received: 09/06/19 13:56

**Lab Sample ID: 400-175908-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 13:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:32	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20034 MW-10**

Date Collected: 09/03/19 14:00

Date Received: 09/06/19 13:56

**Lab Sample ID: 400-175908-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 13:15	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:35	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20035 MW-11**

Date Collected: 09/03/19 15:35

Date Received: 09/06/19 13:56

**Lab Sample ID: 400-175908-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 13:15	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:32	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

Eurofins TestAmerica, Pensacola

# Lab Chronicle

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20036 FB-1**

**Lab Sample ID: 400-175908-5**

Matrix: Water

Date Collected: 09/03/19 15:50

Date Received: 09/06/19 13:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 13:16	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:32	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20037 MW-12**

**Lab Sample ID: 400-175908-6**

Matrix: Water

Date Collected: 09/04/19 10:00

Date Received: 09/06/19 13:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 13:16	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:32	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20038 MW-12 DUP**

**Lab Sample ID: 400-175908-7**

Matrix: Water

Date Collected: 09/04/19 10:00

Date Received: 09/06/19 13:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 07:12	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:32	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20039 MW-13**

**Lab Sample ID: 400-175908-8**

Matrix: Water

Date Collected: 09/04/19 11:55

Date Received: 09/06/19 13:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 07:12	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

Eurofins TestAmerica, Pensacola

# Lab Chronicle

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20040 MW-1**

Date Collected: 09/04/19 13:17

Date Received: 09/06/19 13:56

**Lab Sample ID: 400-175908-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 07:12	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:32	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20041 MW-2**

Date Collected: 09/04/19 09:30

Date Received: 09/06/19 13:56

**Lab Sample ID: 400-175908-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 07:12	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:32	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20042 MW-2 DUP**

Date Collected: 09/04/19 09:30

Date Received: 09/06/19 13:56

**Lab Sample ID: 400-175908-11**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 07:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:33	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20043 MW-14S**

Date Collected: 09/04/19 11:00

Date Received: 09/06/19 13:56

**Lab Sample ID: 400-175908-12**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 07:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444219	09/26/19 08:33	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

Eurofins TestAmerica, Pensacola

# Lab Chronicle

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

**Client Sample ID: AZ20044 MW-3**

**Lab Sample ID: 400-175908-13**

**Matrix: Water**

Date Collected: 09/04/19 12:45  
 Date Received: 09/06/19 13:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 07:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:35	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20045 FB-2**

**Lab Sample ID: 400-175908-14**

**Matrix: Water**

Date Collected: 09/04/19 13:30  
 Date Received: 09/06/19 13:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 13:16	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:35	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20046 MW-15**

**Lab Sample ID: 400-175908-15**

**Matrix: Water**

Date Collected: 09/04/19 14:00  
 Date Received: 09/06/19 13:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 16:50	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

**Client Sample ID: AZ20047 EB-1**

**Lab Sample ID: 400-175908-16**

**Matrix: Water**

Date Collected: 09/04/19 14:30  
 Date Received: 09/06/19 13:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 16:50	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

Eurofins TestAmerica, Pensacola

# Lab Chronicle

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

Job ID: 400-175908-1  
SDG: Gaston Gypsum 1238

## Client Sample ID: AZ20048 MW-5

Date Collected: 09/04/19 09:39

Date Received: 09/06/19 13:56

## Lab Sample ID: 400-175908-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 16:50	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

## Client Sample ID: AZ20049 MW-6

Date Collected: 09/04/19 10:49

Date Received: 09/06/19 13:56

## Lab Sample ID: 400-175908-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 16:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

## Client Sample ID: AZ20050 MW-7

Date Collected: 09/04/19 13:00

Date Received: 09/06/19 13:56

## Lab Sample ID: 400-175908-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			443011	09/16/19 15:47	ORM	TAL SL
Total/NA	Analysis	9315		1	445721	10/10/19 16:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			443015	09/16/19 17:41	ORM	TAL SL
Total/NA	Analysis	9320		1	444223	09/26/19 08:36	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	446022	10/14/19 10:11	SMP	TAL SL

### Laboratory References:

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

# QC Association Summary

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

## Rad

### Prep Batch: 443011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-175908-1	AZ20032 MW-8	Total/NA	Water	PrecSep-21	1
400-175908-2	AZ20033 MW-9	Total/NA	Water	PrecSep-21	2
400-175908-3	AZ20034 MW-10	Total/NA	Water	PrecSep-21	3
400-175908-4	AZ20035 MW-11	Total/NA	Water	PrecSep-21	4
400-175908-5	AZ20036 FB-1	Total/NA	Water	PrecSep-21	5
400-175908-6	AZ20037 MW-12	Total/NA	Water	PrecSep-21	6
400-175908-7	AZ20038 MW-12 DUP	Total/NA	Water	PrecSep-21	7
400-175908-8	AZ20039 MW-13	Total/NA	Water	PrecSep-21	8
400-175908-9	AZ20040 MW-1	Total/NA	Water	PrecSep-21	9
400-175908-10	AZ20041 MW-2	Total/NA	Water	PrecSep-21	10
400-175908-11	AZ20042 MW-2 DUP	Total/NA	Water	PrecSep-21	11
400-175908-12	AZ20043 MW-14S	Total/NA	Water	PrecSep-21	12
400-175908-13	AZ20044 MW-3	Total/NA	Water	PrecSep-21	13
400-175908-14	AZ20045 FB-2	Total/NA	Water	PrecSep-21	
400-175908-15	AZ20046 MW-15	Total/NA	Water	PrecSep-21	
400-175908-16	AZ20047 EB-1	Total/NA	Water	PrecSep-21	
400-175908-17	AZ20048 MW-5	Total/NA	Water	PrecSep-21	
400-175908-18	AZ20049 MW-6	Total/NA	Water	PrecSep-21	
400-175908-19	AZ20050 MW-7	Total/NA	Water	PrecSep-21	
MB 160-443011/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-443011/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-175908-1 DU	AZ20032 MW-8	Total/NA	Water	PrecSep-21	

### Prep Batch: 443015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-175908-1	AZ20032 MW-8	Total/NA	Water	PrecSep_0	1
400-175908-2	AZ20033 MW-9	Total/NA	Water	PrecSep_0	2
400-175908-3	AZ20034 MW-10	Total/NA	Water	PrecSep_0	3
400-175908-4	AZ20035 MW-11	Total/NA	Water	PrecSep_0	4
400-175908-5	AZ20036 FB-1	Total/NA	Water	PrecSep_0	5
400-175908-6	AZ20037 MW-12	Total/NA	Water	PrecSep_0	6
400-175908-7	AZ20038 MW-12 DUP	Total/NA	Water	PrecSep_0	7
400-175908-8	AZ20039 MW-13	Total/NA	Water	PrecSep_0	8
400-175908-9	AZ20040 MW-1	Total/NA	Water	PrecSep_0	9
400-175908-10	AZ20041 MW-2	Total/NA	Water	PrecSep_0	10
400-175908-11	AZ20042 MW-2 DUP	Total/NA	Water	PrecSep_0	11
400-175908-12	AZ20043 MW-14S	Total/NA	Water	PrecSep_0	12
400-175908-13	AZ20044 MW-3	Total/NA	Water	PrecSep_0	13
400-175908-14	AZ20045 FB-2	Total/NA	Water	PrecSep_0	
400-175908-15	AZ20046 MW-15	Total/NA	Water	PrecSep_0	
400-175908-16	AZ20047 EB-1	Total/NA	Water	PrecSep_0	
400-175908-17	AZ20048 MW-5	Total/NA	Water	PrecSep_0	
400-175908-18	AZ20049 MW-6	Total/NA	Water	PrecSep_0	
400-175908-19	AZ20050 MW-7	Total/NA	Water	PrecSep_0	
MB 160-443015/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-443015/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-175908-1 DU	AZ20032 MW-8	Total/NA	Water	PrecSep_0	

# QC Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

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

**Lab Sample ID:** MB 160-443011/22-A

**Matrix:** Water

**Analysis Batch:** 445721

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 443011

Analyte	MB	MB	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Uncert.		(2σ+/-)	Uncert.						
Radium-226	0.02445	U		0.0822	0.0823	1.00	0.153	pCi/L	09/16/19 15:47	10/10/19 16:51	1
<i>Carrier</i>	<i>MB</i>	<i>MB</i>							<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	%Yield	Qualifer		Limits					09/16/19 15:47	10/10/19 16:51	1
	88.1			40 - 110							

**Lab Sample ID:** LCS 160-443011/1-A

**Matrix:** Water

**Analysis Batch:** 445720

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 443011

Analyte	Spike Added	LCs	LCs	Uncert.	Total	RL	MDC	Unit	%Rec	%Rec	Limits
		Result	Qual		(2σ+/-)						
Radium-226	15.1	13.18		1.37	1.37	1.00	0.146	pCi/L	87	75 - 125	
<i>Carrier</i>	<i>LCs</i>	<i>LCs</i>									
Ba Carrier	%Yield	Qualifer		Limits							
	91.2			40 - 110							

**Lab Sample ID:** 400-175908-1 DU

**Matrix:** Water

**Analysis Batch:** 445721

**Client Sample ID:** AZ20032 MW-8  
**Prep Type:** Total/NA  
**Prep Batch:** 443011

Analyte	Sample	Sample	DU	DU	Uncert.	(2σ+/-)	RL	MDC	Unit	RER	RER Limit
	Result	Qual		Result							
Radium-226	0.153		0.08526	U	0.0978	0.0978	1.00	0.159	pCi/L	0.34	1
<i>Carrier</i>	<i>DU</i>	<i>DU</i>									
Ba Carrier	%Yield	Qualifer		Limits							
	94.9			40 - 110							

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

**Lab Sample ID:** MB 160-443015/22-A

**Matrix:** Water

**Analysis Batch:** 444223

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 443015

Analyte	MB	MB	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Uncert.		(2σ+/-)	Uncert.						
Radium-228	0.7893			0.357	0.365	1.00	0.511	pCi/L	09/16/19 17:41	09/26/19 08:37	1
<i>Carrier</i>	<i>MB</i>	<i>MB</i>							<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	%Yield	Qualifer		Limits					09/16/19 17:41	09/26/19 08:37	1
Y Carrier	88.1			40 - 110					09/16/19 17:41	09/26/19 08:37	1
	84.9			40 - 110							

Eurofins TestAmerica, Pensacola

# QC Sample Results

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

Job ID: 400-175908-1  
 SDG: Gaston Gypsum 1238

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

**Lab Sample ID: LCS 160-443015/1-A**

**Matrix: Water**

**Analysis Batch: 444219**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 443015**

Analyte	Spike Added	LCS		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec.	%Rec. Limits
		Result	Qual						
Radium-228	12.7	14.24		1.62	1.00	0.516	pCi/L	112	75 - 125
<b>Carrier</b>									
<i>Ba Carrier</i>									
<i>Ba Carrier</i>		91.2		40 - 110					
<i>Y Carrier</i>		84.1		40 - 110					

**Lab Sample ID: 400-175908-1 DU**

**Matrix: Water**

**Analysis Batch: 444219**

**Client Sample ID: AZ20032 MW-8**

**Prep Type: Total/NA**

**Prep Batch: 443015**

Analyte	Sample		DU		Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual						
Radium-228	0.830		0.7060		0.348	1.00	0.503	pCi/L	0.18	1
<b>Carrier</b>										
<i>Ba Carrier</i>										
<i>Ba Carrier</i>		94.9		40 - 110						
<i>Y Carrier</i>		86.0		40 - 110						

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

**Lab Sample ID: 400-175908-1 DU**

**Matrix: Water**

**Analysis Batch: 446022**

**Client Sample ID: AZ20032 MW-8**

**Prep Type: Total/NA**

Analyte	Sample		DU		Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual						
Combined Radium 226 + 228	0.983		0.7913		0.361	5.00	0.503	pCi/L	0.26	
<b>Carrier</b>										
<i>Ba Carrier</i>										

**TestAmerica Pensacola**

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

**Chain of Custody Record**



File # L-A-C-E-07-EN-Accred-001-A, TestAmerica

Page 1 of 3

Job #:

<b>Client Information (Sub Contract Lab)</b>		Sample#, Phone	Lab. P.M. E-Mail	Carrier Tracking No(s)	COC No	
Alabama Power General Test Laboratory		T.J. Daugherty	chevonne.whitmore@testamericainc.com	State of Origin	400-5525-24537-1	
Address: City	744 County Rd 87 GSC#8	Due Date Requested:	Analysis Requested			
State Zip:		TAT Requested (days):	Routine			
Phone:	205-664-6187	PO #				
Email:	lbnmchif@southernco.com	WO #				
Project Name:	40007143	Project #				
CCR:	SSOW#	Site:				
Gaston Gypsum 1238						
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (water, soil, oil, tissue, ash)	
AZ20032	9/3/19	11:03	G	Wafer		
AZ20033	9/3/19	12:35	G	Wafer		
AZ20034	9/3/19	14:00	G	Wafer	X	
AZ20035	9/3/19	15:35	G	Wafer	X	
AZ20036	9/3/19	15:50	G	Wafer	X	
AZ20037	9/4/19	10:00	G	Wafer	X	
AZ20038	9/4/19	10:00	G	Wafer	X	
AZ20039	9/4/19	11:55	G	Wafer	X	
AZ20040	9/4/19	13:17	G	Wafer	X	
Preservation Code:						
3151_Pa226, 3320_Pa220, Pa226Pa228_GPC						
SM 4500 SO4-6						
SM 4500 Cl-E						
SM 4500 F-G						
Total Number of containers						
400-175908 COC						
Special Instructions/Note:						
Fifteen (15) days from receipt of sample						
Preservation Codes:						
A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2CO3 E - NaHSO4 R - Na2S2O3 F - MeOH S - HSO4 G - Ammonium T - TSP Dodecylamine H - Ascorbic Acid U - Acetone I - Ice V - MCA J - DI Water W - H4-S K - EDTA Z - other (specify) Other:						
43599_Special Instructions/OC Requirements						
Method of Shipment						
Empty Kit Relinquished by:	Date/Time:	Water	Received By	Phone	Company	
Relinquished by: Laura Midkiff	09/05/2019 11:30	APC	11/05/2019 11:30	BS10	BS10 Company	
Relinquished by:	Date/Time:	Company	Received By	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received By	Date/Time:	Company	
Custody Seals intact:	Custody Seal No.: B-1C TD8					Cooler Temperature(s) °C and Other Remarks

Note Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analysis & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above or other institutions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

**Possible Hazard Identification**

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

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

Return to Client  Disposal By Lab

Archive For

43599\_Special Instructions/OC Requirements

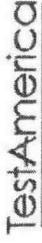
Ver 09/20/2016

B-1C TD8



**TestAmerica Pensacola**

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

**Chain of Custody Record**


THE CLIA '08 CERTIFIED FACILITY

COC No. 400-56525-24537.1

Page:

Job #:

Page 3 of 3

Accreditations Required (See note):

State of Origin:

Alabama

Carrier Tracking No(s):

Whitmire, Cheyenne R

Lab BN:

E-Mail:

cheyenne.whitmire@testamerica.com

Sample:

Dallas Gantry

Phone:

Laura.Mukif

Company:

Alabama Power General Test Laboratory

Address:

744 County Rd 87 GSC#8

City:

Calera

State, Zip:

AL, 35040

Phone:

205-664-6197

Email:

lbumiki@southernco.com

Project Name:

CCR

Job No.:

40007143

SSOW#:

Gaston Gypsum 1238

Date Requested:

TA# Requested (days):

Routine

PO #:

WO #:

Project #:

40007143

SSOW#:

Date Requested:

TA# Requested (days):

Routine

PO #:

WO #:

Project #:

40007143

SSOW#:

Date Requested:

TA# Requested (days):

Routine

PO #:

WO #:

Project #:

40007143

SSOW#:

Date Requested:

TA# Requested (days):

Routine

PO #:

WO #:

Project #:

40007143

SSOW#:

Date Requested:

TA# Requested (days):

Routine

PO #:

WO #:

Project #:

40007143

SSOW#:

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## Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-175908-1  
SDG Number: Gaston Gypsum 1238

**Login Number:** 175908

**List Source:** Eurofins TestAmerica, Pensacola

**List Number:** 1

**Creator:** Brown, Nathan

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	25.1°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-175908-1  
SDG Number: Gaston Gypsum 1238

**Login Number:** 175908

**List Source:** Eurofins TestAmerica, St. Louis  
**List Creation:** 09/10/19 05:12 PM

**List Number:** 2

**Creator:** Hellm, Michael

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	22.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Accreditation/Certification Summary

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

Job ID: 400-175908-1

SDG: Gaston Gypsum 1238

## Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-22-20
Arizona	State	AZ0710	01-12-20
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(Fl)	06-30-20
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
USDA	Federal	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

# Accreditation/Certification Summary

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

Job ID: 400-175908-1

SDG: Gaston Gypsum 1238

## Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-19
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-19
Iowa	State Program	373	12-01-20
Kansas	NELAP	E-10236	10-31-19 *
Kentucky (DW)	State	KY90125	12-31-19
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-19
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-20
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-20
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	02-02-20
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
Washington	State Program	C592	08-30-19 *
West Virginia DEP	State Program	381	10-31-19 *

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

Eurofins TestAmerica, Pensacola

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-5	9/4/2019 9:19	Conductivity	730.36	uS/cm
GN-GSA-MW-5	9/4/2019 9:19	DO	0.46	mg/L
GN-GSA-MW-5	9/4/2019 9:19	Depth to Water Detail	33.53	ft
GN-GSA-MW-5	9/4/2019 9:19	Oxidation Reduction Potention	-29.05	mv
GN-GSA-MW-5	9/4/2019 9:19	pH	6.86	pH
GN-GSA-MW-5	9/4/2019 9:19	Temperature	22.01	C
GN-GSA-MW-5	9/4/2019 9:19	Turbidity	0.68	NTU
GN-GSA-MW-5	9/4/2019 9:24	Conductivity	714.98	uS/cm
GN-GSA-MW-5	9/4/2019 9:24	DO	0.34	mg/L
GN-GSA-MW-5	9/4/2019 9:24	Depth to Water Detail	33.59	ft
GN-GSA-MW-5	9/4/2019 9:24	Oxidation Reduction Potention	-29.77	mv
GN-GSA-MW-5	9/4/2019 9:24	pH	6.84	pH
GN-GSA-MW-5	9/4/2019 9:24	Temperature	21.6	C
GN-GSA-MW-5	9/4/2019 9:24	Turbidity	0.77	NTU
GN-GSA-MW-5	9/4/2019 9:29	Conductivity	699.38	uS/cm
GN-GSA-MW-5	9/4/2019 9:29	DO	0.3	mg/L
GN-GSA-MW-5	9/4/2019 9:29	Depth to Water Detail	33.59	ft
GN-GSA-MW-5	9/4/2019 9:29	Oxidation Reduction Potention	-30.15	mv
GN-GSA-MW-5	9/4/2019 9:29	pH	6.82	pH
GN-GSA-MW-5	9/4/2019 9:29	Temperature	21.64	C
GN-GSA-MW-5	9/4/2019 9:29	Turbidity	0.8	NTU
GN-GSA-MW-5	9/4/2019 9:34	Conductivity	684.58	uS/cm
GN-GSA-MW-5	9/4/2019 9:34	DO	0.29	mg/L
GN-GSA-MW-5	9/4/2019 9:34	Depth to Water Detail	33.59	ft
GN-GSA-MW-5	9/4/2019 9:34	Oxidation Reduction Potention	-38.08	mv
GN-GSA-MW-5	9/4/2019 9:34	pH	6.81	pH
GN-GSA-MW-5	9/4/2019 9:34	Temperature	21.64	C
GN-GSA-MW-5	9/4/2019 9:34	Turbidity	0.55	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-6	9/4/2019 10:29	Conductivity	29	uS/cm
GN-GSA-MW-6	9/4/2019 10:29	DO	1.33	mg/L
GN-GSA-MW-6	9/4/2019 10:29	Depth to Water Detail	32.28	ft
GN-GSA-MW-6	9/4/2019 10:29	Oxidation Reduction Potention	91.36	mv
GN-GSA-MW-6	9/4/2019 10:29	pH	4.53	pH
GN-GSA-MW-6	9/4/2019 10:29	Temperature	21.25	C
GN-GSA-MW-6	9/4/2019 10:29	Turbidity	0.35	NTU
GN-GSA-MW-6	9/4/2019 10:34	Conductivity	30.27	uS/cm
GN-GSA-MW-6	9/4/2019 10:34	DO	0.64	mg/L
GN-GSA-MW-6	9/4/2019 10:34	Depth to Water Detail	32.34	ft
GN-GSA-MW-6	9/4/2019 10:34	Oxidation Reduction Potention	114.4	mv
GN-GSA-MW-6	9/4/2019 10:34	pH	4.55	pH
GN-GSA-MW-6	9/4/2019 10:34	Temperature	21.17	C
GN-GSA-MW-6	9/4/2019 10:34	Turbidity	2.96	NTU
GN-GSA-MW-6	9/4/2019 10:39	Conductivity	29.96	uS/cm
GN-GSA-MW-6	9/4/2019 10:39	DO	0.33	mg/L
GN-GSA-MW-6	9/4/2019 10:39	Depth to Water Detail	32.34	ft
GN-GSA-MW-6	9/4/2019 10:39	Oxidation Reduction Potention	115.43	mv
GN-GSA-MW-6	9/4/2019 10:39	pH	4.57	pH
GN-GSA-MW-6	9/4/2019 10:39	Temperature	21.17	C
GN-GSA-MW-6	9/4/2019 10:39	Turbidity	1.06	NTU
GN-GSA-MW-6	9/4/2019 10:44	Conductivity	29.74	uS/cm
GN-GSA-MW-6	9/4/2019 10:44	DO	0.23	mg/L
GN-GSA-MW-6	9/4/2019 10:44	Depth to Water Detail	32.41	ft
GN-GSA-MW-6	9/4/2019 10:44	Oxidation Reduction Potention	112.87	mv
GN-GSA-MW-6	9/4/2019 10:44	pH	4.59	pH
GN-GSA-MW-6	9/4/2019 10:44	Temperature	21.05	C
GN-GSA-MW-6	9/4/2019 10:44	Turbidity	0.51	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-7	9/4/2019 11:35	Conductivity	608.58	uS/cm
GN-GSA-MW-7	9/4/2019 11:35	DO	0.92	mg/L
GN-GSA-MW-7	9/4/2019 11:35	Depth to Water Detail	29.8	ft
GN-GSA-MW-7	9/4/2019 11:35	Oxidation Reduction Potention	132.75	mv
GN-GSA-MW-7	9/4/2019 11:35	pH	6.88	pH
GN-GSA-MW-7	9/4/2019 11:35	Temperature	25.98	C
GN-GSA-MW-7	9/4/2019 11:35	Turbidity	0.58	NTU
GN-GSA-MW-7	9/4/2019 11:40	Conductivity	614.32	uS/cm
GN-GSA-MW-7	9/4/2019 11:40	DO	0.47	mg/L
GN-GSA-MW-7	9/4/2019 11:40	Depth to Water Detail	30.18	ft
GN-GSA-MW-7	9/4/2019 11:40	Oxidation Reduction Potention	131.19	mv
GN-GSA-MW-7	9/4/2019 11:40	pH	6.89	pH
GN-GSA-MW-7	9/4/2019 11:40	Temperature	25.46	C
GN-GSA-MW-7	9/4/2019 11:40	Turbidity	0.49	NTU
GN-GSA-MW-7	9/4/2019 11:45	Conductivity	606.41	uS/cm
GN-GSA-MW-7	9/4/2019 11:45	DO	0.38	mg/L
GN-GSA-MW-7	9/4/2019 11:45	Depth to Water Detail	30.38	ft
GN-GSA-MW-7	9/4/2019 11:45	Oxidation Reduction Potention	118.96	mv
GN-GSA-MW-7	9/4/2019 11:45	pH	6.9	pH
GN-GSA-MW-7	9/4/2019 11:45	Temperature	25.28	C
GN-GSA-MW-7	9/4/2019 11:45	Turbidity	0.43	NTU
GN-GSA-MW-7	9/4/2019 11:50	Conductivity	581.94	uS/cm
GN-GSA-MW-7	9/4/2019 11:50	DO	0.37	mg/L
GN-GSA-MW-7	9/4/2019 11:50	Depth to Water Detail	30.6	ft
GN-GSA-MW-7	9/4/2019 11:50	Oxidation Reduction Potention	109.57	mv
GN-GSA-MW-7	9/4/2019 11:50	pH	6.89	pH
GN-GSA-MW-7	9/4/2019 11:50	Temperature	25.01	C
GN-GSA-MW-7	9/4/2019 11:50	Turbidity	0.48	NTU
GN-GSA-MW-7	9/4/2019 11:55	Conductivity	562.58	uS/cm
GN-GSA-MW-7	9/4/2019 11:55	DO	0.53	mg/L
GN-GSA-MW-7	9/4/2019 11:55	Depth to Water Detail	30.76	ft
GN-GSA-MW-7	9/4/2019 11:55	Oxidation Reduction Potention	110.32	mv
GN-GSA-MW-7	9/4/2019 11:55	pH	6.86	pH
GN-GSA-MW-7	9/4/2019 11:55	Temperature	26.09	C
GN-GSA-MW-7	9/4/2019 11:55	Turbidity	0.32	NTU
GN-GSA-MW-7	9/4/2019 12:00	Conductivity	521.13	uS/cm
GN-GSA-MW-7	9/4/2019 12:00	DO	0.83	mg/L
GN-GSA-MW-7	9/4/2019 12:00	Depth to Water Detail	30.89	ft
GN-GSA-MW-7	9/4/2019 12:00	Oxidation Reduction Potention	115.66	mv
GN-GSA-MW-7	9/4/2019 12:00	pH	6.88	pH
GN-GSA-MW-7	9/4/2019 12:00	Temperature	25.89	C
GN-GSA-MW-7	9/4/2019 12:00	Turbidity	0.32	NTU
GN-GSA-MW-7	9/4/2019 12:05	Conductivity	496.98	uS/cm
GN-GSA-MW-7	9/4/2019 12:05	DO	0.98	mg/L

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-7	9/4/2019 12:05	Depth to Water Detail	31.07	ft
GN-GSA-MW-7	9/4/2019 12:05	Oxidation Reduction Potention	108.7	mv
GN-GSA-MW-7	9/4/2019 12:05	pH	6.87	pH
GN-GSA-MW-7	9/4/2019 12:05	Temperature	25.31	C
GN-GSA-MW-7	9/4/2019 12:05	Turbidity	0.39	NTU
GN-GSA-MW-7	9/4/2019 12:10	Conductivity	477.23	uS/cm
GN-GSA-MW-7	9/4/2019 12:10	DO	0.98	mg/L
GN-GSA-MW-7	9/4/2019 12:10	Depth to Water Detail	31.11	ft
GN-GSA-MW-7	9/4/2019 12:10	Oxidation Reduction Potention	98.16	mv
GN-GSA-MW-7	9/4/2019 12:10	pH	6.85	pH
GN-GSA-MW-7	9/4/2019 12:10	Temperature	25.37	C
GN-GSA-MW-7	9/4/2019 12:10	Turbidity	0.42	NTU
GN-GSA-MW-7	9/4/2019 12:15	Conductivity	457.66	uS/cm
GN-GSA-MW-7	9/4/2019 12:15	DO	0.94	mg/L
GN-GSA-MW-7	9/4/2019 12:15	Depth to Water Detail	31.17	ft
GN-GSA-MW-7	9/4/2019 12:15	Oxidation Reduction Potention	82.11	mv
GN-GSA-MW-7	9/4/2019 12:15	pH	6.84	pH
GN-GSA-MW-7	9/4/2019 12:15	Temperature	25.41	C
GN-GSA-MW-7	9/4/2019 12:15	Turbidity	0.33	NTU
GN-GSA-MW-7	9/4/2019 12:20	Conductivity	440.27	uS/cm
GN-GSA-MW-7	9/4/2019 12:20	DO	0.92	mg/L
GN-GSA-MW-7	9/4/2019 12:20	Depth to Water Detail	31.26	ft
GN-GSA-MW-7	9/4/2019 12:20	Oxidation Reduction Potention	82.11	mv
GN-GSA-MW-7	9/4/2019 12:20	pH	6.79	pH
GN-GSA-MW-7	9/4/2019 12:20	Temperature	26.42	C
GN-GSA-MW-7	9/4/2019 12:20	Turbidity	0.72	NTU
GN-GSA-MW-7	9/4/2019 12:25	Conductivity	426.11	uS/cm
GN-GSA-MW-7	9/4/2019 12:25	DO	0.87	mg/L
GN-GSA-MW-7	9/4/2019 12:25	Depth to Water Detail	31.35	ft
GN-GSA-MW-7	9/4/2019 12:25	Oxidation Reduction Potention	78.86	mv
GN-GSA-MW-7	9/4/2019 12:25	pH	6.82	pH
GN-GSA-MW-7	9/4/2019 12:25	Temperature	25.9	C
GN-GSA-MW-7	9/4/2019 12:25	Turbidity	0.35	NTU
GN-GSA-MW-7	9/4/2019 12:30	Conductivity	415.23	uS/cm
GN-GSA-MW-7	9/4/2019 12:30	DO	0.81	mg/L
GN-GSA-MW-7	9/4/2019 12:30	Depth to Water Detail	31.42	ft
GN-GSA-MW-7	9/4/2019 12:30	Oxidation Reduction Potention	70.91	mv
GN-GSA-MW-7	9/4/2019 12:30	pH	6.8	pH
GN-GSA-MW-7	9/4/2019 12:30	Temperature	25.72	C
GN-GSA-MW-7	9/4/2019 12:30	Turbidity	0.41	NTU
GN-GSA-MW-7	9/4/2019 12:35	Conductivity	406.41	uS/cm
GN-GSA-MW-7	9/4/2019 12:35	DO	0.76	mg/L
GN-GSA-MW-7	9/4/2019 12:35	Depth to Water Detail	31.47	ft
GN-GSA-MW-7	9/4/2019 12:35	Oxidation Reduction Potention	60.98	mv

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-7	9/4/2019 12:35	pH	6.8	pH
GN-GSA-MW-7	9/4/2019 12:35	Temperature	25.23	C
GN-GSA-MW-7	9/4/2019 12:35	Turbidity	0.34	NTU
GN-GSA-MW-7	9/4/2019 12:40	Conductivity	397.31	uS/cm
GN-GSA-MW-7	9/4/2019 12:40	DO	0.71	mg/L
GN-GSA-MW-7	9/4/2019 12:40	Depth to Water Detail	31.51	ft
GN-GSA-MW-7	9/4/2019 12:40	Oxidation Reduction Potention	54.62	mv
GN-GSA-MW-7	9/4/2019 12:40	pH	6.79	pH
GN-GSA-MW-7	9/4/2019 12:40	Temperature	25.13	C
GN-GSA-MW-7	9/4/2019 12:40	Turbidity	0.47	NTU
GN-GSA-MW-7	9/4/2019 12:45	Conductivity	385.47	uS/cm
GN-GSA-MW-7	9/4/2019 12:45	DO	0.69	mg/L
GN-GSA-MW-7	9/4/2019 12:45	Depth to Water Detail	31.6	ft
GN-GSA-MW-7	9/4/2019 12:45	Oxidation Reduction Potention	40.17	mv
GN-GSA-MW-7	9/4/2019 12:45	pH	6.77	pH
GN-GSA-MW-7	9/4/2019 12:45	Temperature	26.1	C
GN-GSA-MW-7	9/4/2019 12:45	Turbidity	0.37	NTU
GN-GSA-MW-7	9/4/2019 12:50	Conductivity	377.66	uS/cm
GN-GSA-MW-7	9/4/2019 12:50	DO	0.66	mg/L
GN-GSA-MW-7	9/4/2019 12:50	Depth to Water Detail	31.64	ft
GN-GSA-MW-7	9/4/2019 12:50	Oxidation Reduction Potention	34.42	mv
GN-GSA-MW-7	9/4/2019 12:50	pH	6.78	pH
GN-GSA-MW-7	9/4/2019 12:50	Temperature	25.76	C
GN-GSA-MW-7	9/4/2019 12:50	Turbidity	0.33	NTU
GN-GSA-MW-7	9/4/2019 12:55	Conductivity	369.04	uS/cm
GN-GSA-MW-7	9/4/2019 12:55	DO	0.64	mg/L
GN-GSA-MW-7	9/4/2019 12:55	Depth to Water Detail	31.68	ft
GN-GSA-MW-7	9/4/2019 12:55	Oxidation Reduction Potention	36.23	mv
GN-GSA-MW-7	9/4/2019 12:55	pH	6.78	pH
GN-GSA-MW-7	9/4/2019 12:55	Temperature	25.62	C
GN-GSA-MW-7	9/4/2019 12:55	Turbidity	0.5	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-13	9/4/2019 11:36	Conductivity	497.95	uS/cm
GN-GSA-MW-13	9/4/2019 11:36	DO	0.45	mg/L
GN-GSA-MW-13	9/4/2019 11:36	Depth to Water Detail	28.45	ft
GN-GSA-MW-13	9/4/2019 11:36	Oxidation Reduction Potention	63.51	mv
GN-GSA-MW-13	9/4/2019 11:36	pH	7.08	pH
GN-GSA-MW-13	9/4/2019 11:36	Temperature	20.92	C
GN-GSA-MW-13	9/4/2019 11:36	Turbidity	0.74	NTU
GN-GSA-MW-13	9/4/2019 11:41	Conductivity	494.72	uS/cm
GN-GSA-MW-13	9/4/2019 11:41	DO	0.42	mg/L
GN-GSA-MW-13	9/4/2019 11:41	Depth to Water Detail	28.45	ft
GN-GSA-MW-13	9/4/2019 11:41	Oxidation Reduction Potention	71.89	mv
GN-GSA-MW-13	9/4/2019 11:41	pH	6.84	pH
GN-GSA-MW-13	9/4/2019 11:41	Temperature	20.67	C
GN-GSA-MW-13	9/4/2019 11:41	Turbidity	0.68	NTU
GN-GSA-MW-13	9/4/2019 11:46	Conductivity	492.67	uS/cm
GN-GSA-MW-13	9/4/2019 11:46	DO	0.38	mg/L
GN-GSA-MW-13	9/4/2019 11:46	Depth to Water Detail	28.45	ft
GN-GSA-MW-13	9/4/2019 11:46	Oxidation Reduction Potention	76.21	mv
GN-GSA-MW-13	9/4/2019 11:46	pH	6.72	pH
GN-GSA-MW-13	9/4/2019 11:46	Temperature	20.82	C
GN-GSA-MW-13	9/4/2019 11:46	Turbidity	0.72	NTU
GN-GSA-MW-13	9/4/2019 11:51	Conductivity	490.68	uS/cm
GN-GSA-MW-13	9/4/2019 11:51	DO	0.39	mg/L
GN-GSA-MW-13	9/4/2019 11:51	Depth to Water Detail	28.45	ft
GN-GSA-MW-13	9/4/2019 11:51	Oxidation Reduction Potention	75.73	mv
GN-GSA-MW-13	9/4/2019 11:51	pH	6.71	pH
GN-GSA-MW-13	9/4/2019 11:51	Temperature	20.84	C
GN-GSA-MW-13	9/4/2019 11:51	Turbidity	0.36	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-1	9/4/2019 12:59	Conductivity	369.18	uS/cm
GN-GSA-MW-1	9/4/2019 12:59	DO	0.9	mg/L
GN-GSA-MW-1	9/4/2019 12:59	Depth to Water Detail	33.4	ft
GN-GSA-MW-1	9/4/2019 12:59	Oxidation Reduction Potention	10.19	mv
GN-GSA-MW-1	9/4/2019 12:59	pH	7.58	pH
GN-GSA-MW-1	9/4/2019 12:59	Temperature	22.7	C
GN-GSA-MW-1	9/4/2019 12:59	Turbidity	3.29	NTU
GN-GSA-MW-1	9/4/2019 13:04	Conductivity	367.74	uS/cm
GN-GSA-MW-1	9/4/2019 13:04	DO	0.5	mg/L
GN-GSA-MW-1	9/4/2019 13:04	Depth to Water Detail	33.76	ft
GN-GSA-MW-1	9/4/2019 13:04	Oxidation Reduction Potention	5.73	mv
GN-GSA-MW-1	9/4/2019 13:04	pH	7.45	pH
GN-GSA-MW-1	9/4/2019 13:04	Temperature	22.77	C
GN-GSA-MW-1	9/4/2019 13:04	Turbidity	0.51	NTU
GN-GSA-MW-1	9/4/2019 13:09	Conductivity	363.89	uS/cm
GN-GSA-MW-1	9/4/2019 13:09	DO	0.45	mg/L
GN-GSA-MW-1	9/4/2019 13:09	Depth to Water Detail	33.84	ft
GN-GSA-MW-1	9/4/2019 13:09	Oxidation Reduction Potention	-0.71	mv
GN-GSA-MW-1	9/4/2019 13:09	pH	7.39	pH
GN-GSA-MW-1	9/4/2019 13:09	Temperature	22.66	C
GN-GSA-MW-1	9/4/2019 13:09	Turbidity	0.2	NTU
GN-GSA-MW-1	9/4/2019 13:14	Conductivity	360.26	uS/cm
GN-GSA-MW-1	9/4/2019 13:14	DO	0.49	mg/L
GN-GSA-MW-1	9/4/2019 13:14	Depth to Water Detail	33.87	ft
GN-GSA-MW-1	9/4/2019 13:14	Oxidation Reduction Potention	-8.24	mv
GN-GSA-MW-1	9/4/2019 13:14	pH	7.4	pH
GN-GSA-MW-1	9/4/2019 13:14	Temperature	22.4	C
GN-GSA-MW-1	9/4/2019 13:14	Turbidity	0.11	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-8	9/3/2019 10:44	Conductivity	330.79	uS/cm
GN-GSA-MW-8	9/3/2019 10:44	DO	0.57	mg/L
GN-GSA-MW-8	9/3/2019 10:44	Depth to Water Detail	22.51	ft
GN-GSA-MW-8	9/3/2019 10:44	Oxidation Reduction Potention	59.18	mv
GN-GSA-MW-8	9/3/2019 10:44	pH	7.47	pH
GN-GSA-MW-8	9/3/2019 10:44	Temperature	22.75	C
GN-GSA-MW-8	9/3/2019 10:44	Turbidity	0.92	NTU
GN-GSA-MW-8	9/3/2019 10:49	Conductivity	330.79	uS/cm
GN-GSA-MW-8	9/3/2019 10:49	DO	0.59	mg/L
GN-GSA-MW-8	9/3/2019 10:49	Depth to Water Detail	22.53	ft
GN-GSA-MW-8	9/3/2019 10:49	Oxidation Reduction Potention	58.22	mv
GN-GSA-MW-8	9/3/2019 10:49	pH	7.46	pH
GN-GSA-MW-8	9/3/2019 10:49	Temperature	22.75	C
GN-GSA-MW-8	9/3/2019 10:49	Turbidity	0.84	NTU
GN-GSA-MW-8	9/3/2019 10:54	Conductivity	331.43	uS/cm
GN-GSA-MW-8	9/3/2019 10:54	DO	0.49	mg/L
GN-GSA-MW-8	9/3/2019 10:54	Depth to Water Detail	22.53	ft
GN-GSA-MW-8	9/3/2019 10:54	Oxidation Reduction Potention	56.44	mv
GN-GSA-MW-8	9/3/2019 10:54	pH	7.45	pH
GN-GSA-MW-8	9/3/2019 10:54	Temperature	23.13	C
GN-GSA-MW-8	9/3/2019 10:54	Turbidity	0.5	NTU
GN-GSA-MW-8	9/3/2019 10:59	Conductivity	330.74	uS/cm
GN-GSA-MW-8	9/3/2019 10:59	DO	0.52	mg/L
GN-GSA-MW-8	9/3/2019 10:59	Depth to Water Detail	22.53	ft
GN-GSA-MW-8	9/3/2019 10:59	Oxidation Reduction Potention	53.03	mv
GN-GSA-MW-8	9/3/2019 10:59	pH	7.46	pH
GN-GSA-MW-8	9/3/2019 10:59	Temperature	23.08	C
GN-GSA-MW-8	9/3/2019 10:59	Turbidity	0.58	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-9	9/3/2019 12:16	Conductivity	319.59	uS/cm
GN-GSA-MW-9	9/3/2019 12:16	DO	0.41	mg/L
GN-GSA-MW-9	9/3/2019 12:16	Depth to Water Detail	24.46	ft
GN-GSA-MW-9	9/3/2019 12:16	Oxidation Reduction Potention	72.56	mv
GN-GSA-MW-9	9/3/2019 12:16	pH	6.46	pH
GN-GSA-MW-9	9/3/2019 12:16	Temperature	21.94	C
GN-GSA-MW-9	9/3/2019 12:16	Turbidity	4.86	NTU
GN-GSA-MW-9	9/3/2019 12:21	Conductivity	323.35	uS/cm
GN-GSA-MW-9	9/3/2019 12:21	DO	0.35	mg/L
GN-GSA-MW-9	9/3/2019 12:21	Depth to Water Detail	24.53	ft
GN-GSA-MW-9	9/3/2019 12:21	Oxidation Reduction Potention	73.87	mv
GN-GSA-MW-9	9/3/2019 12:21	pH	6.41	pH
GN-GSA-MW-9	9/3/2019 12:21	Temperature	21.76	C
GN-GSA-MW-9	9/3/2019 12:21	Turbidity	5.67	NTU
GN-GSA-MW-9	9/3/2019 12:26	Conductivity	331.53	uS/cm
GN-GSA-MW-9	9/3/2019 12:26	DO	0.27	mg/L
GN-GSA-MW-9	9/3/2019 12:26	Depth to Water Detail	24.61	ft
GN-GSA-MW-9	9/3/2019 12:26	Oxidation Reduction Potention	71.99	mv
GN-GSA-MW-9	9/3/2019 12:26	pH	6.47	pH
GN-GSA-MW-9	9/3/2019 12:26	Temperature	21.57	C
GN-GSA-MW-9	9/3/2019 12:26	Turbidity	6.02	NTU
GN-GSA-MW-9	9/3/2019 12:31	Conductivity	333.12	uS/cm
GN-GSA-MW-9	9/3/2019 12:31	DO	0.27	mg/L
GN-GSA-MW-9	9/3/2019 12:31	Depth to Water Detail	24.73	ft
GN-GSA-MW-9	9/3/2019 12:31	Oxidation Reduction Potention	68.57	mv
GN-GSA-MW-9	9/3/2019 12:31	pH	6.53	pH
GN-GSA-MW-9	9/3/2019 12:31	Temperature	21.57	C
GN-GSA-MW-9	9/3/2019 12:31	Turbidity	4.31	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-10	9/3/2019 13:40	Conductivity	444.82	uS/cm
GN-GSA-MW-10	9/3/2019 13:40	DO	0.41	mg/L
GN-GSA-MW-10	9/3/2019 13:40	Depth to Water Detail	23.32	ft
GN-GSA-MW-10	9/3/2019 13:40	Oxidation Reduction Potention	52.45	mv
GN-GSA-MW-10	9/3/2019 13:40	pH	6.63	pH
GN-GSA-MW-10	9/3/2019 13:40	Temperature	22.1	C
GN-GSA-MW-10	9/3/2019 13:40	Turbidity	1.42	NTU
GN-GSA-MW-10	9/3/2019 13:45	Conductivity	444.26	uS/cm
GN-GSA-MW-10	9/3/2019 13:45	DO	0.42	mg/L
GN-GSA-MW-10	9/3/2019 13:45	Depth to Water Detail	23.35	ft
GN-GSA-MW-10	9/3/2019 13:45	Oxidation Reduction Potention	50.18	mv
GN-GSA-MW-10	9/3/2019 13:45	pH	6.63	pH
GN-GSA-MW-10	9/3/2019 13:45	Temperature	21.97	C
GN-GSA-MW-10	9/3/2019 13:45	Turbidity	0.77	NTU
GN-GSA-MW-10	9/3/2019 13:50	Conductivity	442.61	uS/cm
GN-GSA-MW-10	9/3/2019 13:50	DO	0.39	mg/L
GN-GSA-MW-10	9/3/2019 13:50	Depth to Water Detail	23.35	ft
GN-GSA-MW-10	9/3/2019 13:50	Oxidation Reduction Potention	48.23	mv
GN-GSA-MW-10	9/3/2019 13:50	pH	6.66	pH
GN-GSA-MW-10	9/3/2019 13:50	Temperature	21.97	C
GN-GSA-MW-10	9/3/2019 13:50	Turbidity	0.32	NTU
GN-GSA-MW-10	9/3/2019 13:55	Conductivity	443.79	uS/cm
GN-GSA-MW-10	9/3/2019 13:55	DO	0.34	mg/L
GN-GSA-MW-10	9/3/2019 13:55	Depth to Water Detail	23.35	ft
GN-GSA-MW-10	9/3/2019 13:55	Oxidation Reduction Potention	47.21	mv
GN-GSA-MW-10	9/3/2019 13:55	pH	6.67	pH
GN-GSA-MW-10	9/3/2019 13:55	Temperature	21.88	C
GN-GSA-MW-10	9/3/2019 13:55	Turbidity	0.19	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-11	9/3/2019 15:16	Conductivity	87.53	uS/cm
GN-GSA-MW-11	9/3/2019 15:16	DO	0.58	mg/L
GN-GSA-MW-11	9/3/2019 15:16	Depth to Water Detail	22.55	ft
GN-GSA-MW-11	9/3/2019 15:16	Oxidation Reduction Potention	129.95	mv
GN-GSA-MW-11	9/3/2019 15:16	pH	5.4	pH
GN-GSA-MW-11	9/3/2019 15:16	Temperature	22.49	C
GN-GSA-MW-11	9/3/2019 15:16	Turbidity	0.49	NTU
GN-GSA-MW-11	9/3/2019 15:21	Conductivity	86.77	uS/cm
GN-GSA-MW-11	9/3/2019 15:21	DO	0.22	mg/L
GN-GSA-MW-11	9/3/2019 15:21	Depth to Water Detail	22.61	ft
GN-GSA-MW-11	9/3/2019 15:21	Oxidation Reduction Potention	143.6	mv
GN-GSA-MW-11	9/3/2019 15:21	pH	5.16	pH
GN-GSA-MW-11	9/3/2019 15:21	Temperature	22.58	C
GN-GSA-MW-11	9/3/2019 15:21	Turbidity	0.34	NTU
GN-GSA-MW-11	9/3/2019 15:26	Conductivity	89.47	uS/cm
GN-GSA-MW-11	9/3/2019 15:26	DO	0.17	mg/L
GN-GSA-MW-11	9/3/2019 15:26	Depth to Water Detail	22.61	ft
GN-GSA-MW-11	9/3/2019 15:26	Oxidation Reduction Potention	152.86	mv
GN-GSA-MW-11	9/3/2019 15:26	pH	5.12	pH
GN-GSA-MW-11	9/3/2019 15:26	Temperature	22.56	C
GN-GSA-MW-11	9/3/2019 15:26	Turbidity	0.23	NTU
GN-GSA-MW-11	9/3/2019 15:31	Conductivity	88.99	uS/cm
GN-GSA-MW-11	9/3/2019 15:31	DO	0.15	mg/L
GN-GSA-MW-11	9/3/2019 15:31	Depth to Water Detail	22.61	ft
GN-GSA-MW-11	9/3/2019 15:31	Oxidation Reduction Potention	156.43	mv
GN-GSA-MW-11	9/3/2019 15:31	pH	5.12	pH
GN-GSA-MW-11	9/3/2019 15:31	Temperature	22.51	C
GN-GSA-MW-11	9/3/2019 15:31	Turbidity	0.06	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-12	9/4/2019 9:42	Conductivity	399.08	uS/cm
GN-GSA-MW-12	9/4/2019 9:42	DO	0.2	mg/L
GN-GSA-MW-12	9/4/2019 9:42	Depth to Water Detail	21.93	ft
GN-GSA-MW-12	9/4/2019 9:42	Oxidation Reduction Potention	38.46	mv
GN-GSA-MW-12	9/4/2019 9:42	pH	7.29	pH
GN-GSA-MW-12	9/4/2019 9:42	Temperature	21.76	C
GN-GSA-MW-12	9/4/2019 9:42	Turbidity	0.31	NTU
GN-GSA-MW-12	9/4/2019 9:47	Conductivity	397.63	uS/cm
GN-GSA-MW-12	9/4/2019 9:47	DO	0.2	mg/L
GN-GSA-MW-12	9/4/2019 9:47	Depth to Water Detail	21.93	ft
GN-GSA-MW-12	9/4/2019 9:47	Oxidation Reduction Potention	29.09	mv
GN-GSA-MW-12	9/4/2019 9:47	pH	7.28	pH
GN-GSA-MW-12	9/4/2019 9:47	Temperature	21.82	C
GN-GSA-MW-12	9/4/2019 9:47	Turbidity	0.43	NTU
GN-GSA-MW-12	9/4/2019 9:52	Conductivity	394.67	uS/cm
GN-GSA-MW-12	9/4/2019 9:52	DO	0.22	mg/L
GN-GSA-MW-12	9/4/2019 9:52	Depth to Water Detail	21.93	ft
GN-GSA-MW-12	9/4/2019 9:52	Oxidation Reduction Potention	23.91	mv
GN-GSA-MW-12	9/4/2019 9:52	pH	7.25	pH
GN-GSA-MW-12	9/4/2019 9:52	Temperature	21.87	C
GN-GSA-MW-12	9/4/2019 9:52	Turbidity	0.22	NTU
GN-GSA-MW-12	9/4/2019 9:57	Conductivity	391.41	uS/cm
GN-GSA-MW-12	9/4/2019 9:57	DO	0.24	mg/L
GN-GSA-MW-12	9/4/2019 9:57	Depth to Water Detail	21.93	ft
GN-GSA-MW-12	9/4/2019 9:57	Oxidation Reduction Potention	19.7	mv
GN-GSA-MW-12	9/4/2019 9:57	pH	7.24	pH
GN-GSA-MW-12	9/4/2019 9:57	Temperature	21.97	C
GN-GSA-MW-12	9/4/2019 9:57	Turbidity	0.14	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-2	9/4/2019 9:09	Conductivity	536.55	uS/cm
GN-GSA-MW-2	9/4/2019 9:09	DO	2.55	mg/L
GN-GSA-MW-2	9/4/2019 9:09	Depth to Water Detail	25.45	ft
GN-GSA-MW-2	9/4/2019 9:09	Oxidation Reduction Potention	-25.35	mv
GN-GSA-MW-2	9/4/2019 9:09	pH	7.14	pH
GN-GSA-MW-2	9/4/2019 9:09	Temperature	22.65	C
GN-GSA-MW-2	9/4/2019 9:09	Turbidity	3.87	NTU
GN-GSA-MW-2	9/4/2019 9:14	Conductivity	532.04	uS/cm
GN-GSA-MW-2	9/4/2019 9:14	DO	2.56	mg/L
GN-GSA-MW-2	9/4/2019 9:14	Depth to Water Detail	25.45	ft
GN-GSA-MW-2	9/4/2019 9:14	Oxidation Reduction Potention	12.92	mv
GN-GSA-MW-2	9/4/2019 9:14	pH	7.15	pH
GN-GSA-MW-2	9/4/2019 9:14	Temperature	22.7	C
GN-GSA-MW-2	9/4/2019 9:14	Turbidity	3.47	NTU
GN-GSA-MW-2	9/4/2019 9:19	Conductivity	520.52	uS/cm
GN-GSA-MW-2	9/4/2019 9:19	DO	2.37	mg/L
GN-GSA-MW-2	9/4/2019 9:19	Depth to Water Detail	25.45	ft
GN-GSA-MW-2	9/4/2019 9:19	Oxidation Reduction Potention	32.68	mv
GN-GSA-MW-2	9/4/2019 9:19	pH	7.17	pH
GN-GSA-MW-2	9/4/2019 9:19	Temperature	22.73	C
GN-GSA-MW-2	9/4/2019 9:19	Turbidity	3.47	NTU
GN-GSA-MW-2	9/4/2019 9:24	Conductivity	519.09	uS/cm
GN-GSA-MW-2	9/4/2019 9:24	DO	2.34	mg/L
GN-GSA-MW-2	9/4/2019 9:24	Depth to Water Detail	25.45	ft
GN-GSA-MW-2	9/4/2019 9:24	Oxidation Reduction Potention	43.91	mv
GN-GSA-MW-2	9/4/2019 9:24	pH	7.16	pH
GN-GSA-MW-2	9/4/2019 9:24	Temperature	22.88	C
GN-GSA-MW-2	9/4/2019 9:24	Turbidity	3.51	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-14S	9/4/2019 10:35	Conductivity	323.41	uS/cm
GN-GSA-MW-14S	9/4/2019 10:35	DO	0.64	mg/L
GN-GSA-MW-14S	9/4/2019 10:35	Depth to Water Detail	26.02	ft
GN-GSA-MW-14S	9/4/2019 10:35	Oxidation Reduction Potention	171.54	mv
GN-GSA-MW-14S	9/4/2019 10:35	pH	7.43	pH
GN-GSA-MW-14S	9/4/2019 10:35	Temperature	21.08	C
GN-GSA-MW-14S	9/4/2019 10:35	Turbidity	5.84	NTU
GN-GSA-MW-14S	9/4/2019 10:40	Conductivity	330.18	uS/cm
GN-GSA-MW-14S	9/4/2019 10:40	DO	0.43	mg/L
GN-GSA-MW-14S	9/4/2019 10:40	Depth to Water Detail	26.05	ft
GN-GSA-MW-14S	9/4/2019 10:40	Oxidation Reduction Potention	154.89	mv
GN-GSA-MW-14S	9/4/2019 10:40	pH	7.44	pH
GN-GSA-MW-14S	9/4/2019 10:40	Temperature	21.09	C
GN-GSA-MW-14S	9/4/2019 10:40	Turbidity	6.2	NTU
GN-GSA-MW-14S	9/4/2019 10:45	Conductivity	343.81	uS/cm
GN-GSA-MW-14S	9/4/2019 10:45	DO	0.37	mg/L
GN-GSA-MW-14S	9/4/2019 10:45	Depth to Water Detail	26.05	ft
GN-GSA-MW-14S	9/4/2019 10:45	Oxidation Reduction Potention	9.77	mv
GN-GSA-MW-14S	9/4/2019 10:45	pH	7.44	pH
GN-GSA-MW-14S	9/4/2019 10:45	Temperature	21	C
GN-GSA-MW-14S	9/4/2019 10:45	Turbidity	5.12	NTU
GN-GSA-MW-14S	9/4/2019 10:50	Conductivity	349.57	uS/cm
GN-GSA-MW-14S	9/4/2019 10:50	DO	0.36	mg/L
GN-GSA-MW-14S	9/4/2019 10:50	Depth to Water Detail	26.05	ft
GN-GSA-MW-14S	9/4/2019 10:50	Oxidation Reduction Potention	-54.56	mv
GN-GSA-MW-14S	9/4/2019 10:50	pH	7.44	pH
GN-GSA-MW-14S	9/4/2019 10:50	Temperature	21.05	C
GN-GSA-MW-14S	9/4/2019 10:50	Turbidity	4.86	NTU
GN-GSA-MW-14S	9/4/2019 10:55	Conductivity	349.88	uS/cm
GN-GSA-MW-14S	9/4/2019 10:55	DO	0.35	mg/L
GN-GSA-MW-14S	9/4/2019 10:55	Depth to Water Detail	26.05	ft
GN-GSA-MW-14S	9/4/2019 10:55	Oxidation Reduction Potention	-68.08	mv
GN-GSA-MW-14S	9/4/2019 10:55	pH	7.45	pH
GN-GSA-MW-14S	9/4/2019 10:55	Temperature	20.91	C
GN-GSA-MW-14S	9/4/2019 10:55	Turbidity	4.87	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-15	9/4/2019 13:34	Conductivity	41.9	uS/cm
GN-GSA-MW-15	9/4/2019 13:34	DO	1.58	mg/L
GN-GSA-MW-15	9/4/2019 13:34	Depth to Water Detail	26.95	ft
GN-GSA-MW-15	9/4/2019 13:34	Oxidation Reduction Potention	244.46	mv
GN-GSA-MW-15	9/4/2019 13:34	pH	5.8	pH
GN-GSA-MW-15	9/4/2019 13:34	Temperature	23.06	C
GN-GSA-MW-15	9/4/2019 13:34	Turbidity	3.45	NTU
GN-GSA-MW-15	9/4/2019 13:39	Conductivity	41.53	uS/cm
GN-GSA-MW-15	9/4/2019 13:39	DO	1.54	mg/L
GN-GSA-MW-15	9/4/2019 13:39	Depth to Water Detail	27.11	ft
GN-GSA-MW-15	9/4/2019 13:39	Oxidation Reduction Potention	253.6	mv
GN-GSA-MW-15	9/4/2019 13:39	pH	5.7	pH
GN-GSA-MW-15	9/4/2019 13:39	Temperature	24.13	C
GN-GSA-MW-15	9/4/2019 13:39	Turbidity	3.6	NTU
GN-GSA-MW-15	9/4/2019 13:44	Conductivity	41.63	uS/cm
GN-GSA-MW-15	9/4/2019 13:44	DO	1.41	mg/L
GN-GSA-MW-15	9/4/2019 13:44	Depth to Water Detail	27.25	ft
GN-GSA-MW-15	9/4/2019 13:44	Oxidation Reduction Potention	257.08	mv
GN-GSA-MW-15	9/4/2019 13:44	pH	5.7	pH
GN-GSA-MW-15	9/4/2019 13:44	Temperature	24.13	C
GN-GSA-MW-15	9/4/2019 13:44	Turbidity	3.65	NTU
GN-GSA-MW-15	9/4/2019 13:49	Conductivity	41.57	uS/cm
GN-GSA-MW-15	9/4/2019 13:49	DO	1.31	mg/L
GN-GSA-MW-15	9/4/2019 13:49	Depth to Water Detail	27.33	ft
GN-GSA-MW-15	9/4/2019 13:49	Oxidation Reduction Potention	261.34	mv
GN-GSA-MW-15	9/4/2019 13:49	pH	5.68	pH
GN-GSA-MW-15	9/4/2019 13:49	Temperature	23.96	C
GN-GSA-MW-15	9/4/2019 13:49	Turbidity	3.91	NTU
GN-GSA-MW-15	9/4/2019 13:54	Conductivity	41.55	uS/cm
GN-GSA-MW-15	9/4/2019 13:54	DO	1.26	mg/L
GN-GSA-MW-15	9/4/2019 13:54	Depth to Water Detail	27.38	ft
GN-GSA-MW-15	9/4/2019 13:54	Oxidation Reduction Potention	263.95	mv
GN-GSA-MW-15	9/4/2019 13:54	pH	5.67	pH
GN-GSA-MW-15	9/4/2019 13:54	Temperature	24.02	C
GN-GSA-MW-15	9/4/2019 13:54	Turbidity	4.46	NTU

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-3	9/4/2019 11:32	Conductivity	305.35	uS/cm
GN-GSA-MW-3	9/4/2019 11:32	DO	0.82	mg/L
GN-GSA-MW-3	9/4/2019 11:32	Depth to Water Detail	28.4	ft
GN-GSA-MW-3	9/4/2019 11:32	Oxidation Reduction Potention	135.45	mv
GN-GSA-MW-3	9/4/2019 11:32	pH	6.44	pH
GN-GSA-MW-3	9/4/2019 11:32	Temperature	21.03	C
GN-GSA-MW-3	9/4/2019 11:32	Turbidity	3.62	NTU
GN-GSA-MW-3	9/4/2019 11:37	Conductivity	284.03	uS/cm
GN-GSA-MW-3	9/4/2019 11:37	DO	1.42	mg/L
GN-GSA-MW-3	9/4/2019 11:37	Depth to Water Detail	29.9	ft
GN-GSA-MW-3	9/4/2019 11:37	Oxidation Reduction Potention	151.78	mv
GN-GSA-MW-3	9/4/2019 11:37	pH	6.36	pH
GN-GSA-MW-3	9/4/2019 11:37	Temperature	20.95	C
GN-GSA-MW-3	9/4/2019 11:37	Turbidity	3.37	NTU
GN-GSA-MW-3	9/4/2019 11:42	Conductivity	288.03	uS/cm
GN-GSA-MW-3	9/4/2019 11:42	DO	1.41	mg/L
GN-GSA-MW-3	9/4/2019 11:42	Depth to Water Detail	30.73	ft
GN-GSA-MW-3	9/4/2019 11:42	Oxidation Reduction Potention	161.62	mv
GN-GSA-MW-3	9/4/2019 11:42	pH	6.37	pH
GN-GSA-MW-3	9/4/2019 11:42	Temperature	21.31	C
GN-GSA-MW-3	9/4/2019 11:42	Turbidity	3.89	NTU
GN-GSA-MW-3	9/4/2019 11:47	Conductivity	296.5	uS/cm
GN-GSA-MW-3	9/4/2019 11:47	DO	1.3	mg/L
GN-GSA-MW-3	9/4/2019 11:47	Depth to Water Detail	31.35	ft
GN-GSA-MW-3	9/4/2019 11:47	Oxidation Reduction Potention	169.35	mv
GN-GSA-MW-3	9/4/2019 11:47	pH	6.38	pH
GN-GSA-MW-3	9/4/2019 11:47	Temperature	21.32	C
GN-GSA-MW-3	9/4/2019 11:47	Turbidity	3.92	NTU
GN-GSA-MW-3	9/4/2019 11:52	Conductivity	303.98	uS/cm
GN-GSA-MW-3	9/4/2019 11:52	DO	1.25	mg/L
GN-GSA-MW-3	9/4/2019 11:52	Depth to Water Detail	31.9	ft
GN-GSA-MW-3	9/4/2019 11:52	Oxidation Reduction Potention	174.08	mv
GN-GSA-MW-3	9/4/2019 11:52	pH	6.41	pH
GN-GSA-MW-3	9/4/2019 11:52	Temperature	21.24	C
GN-GSA-MW-3	9/4/2019 11:52	Turbidity	4.27	NTU
GN-GSA-MW-3	9/4/2019 11:57	Conductivity	309.26	uS/cm
GN-GSA-MW-3	9/4/2019 11:57	DO	1.23	mg/L
GN-GSA-MW-3	9/4/2019 11:57	Depth to Water Detail	31.93	ft
GN-GSA-MW-3	9/4/2019 11:57	Oxidation Reduction Potention	177.96	mv
GN-GSA-MW-3	9/4/2019 11:57	pH	6.43	pH
GN-GSA-MW-3	9/4/2019 11:57	Temperature	21.3	C
GN-GSA-MW-3	9/4/2019 11:57	Turbidity	3.73	NTU
GN-GSA-MW-3	9/4/2019 12:02	Conductivity	313.69	uS/cm
GN-GSA-MW-3	9/4/2019 12:02	DO	1.38	mg/L

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-3	9/4/2019 12:02	Depth to Water Detail	31.6	ft
GN-GSA-MW-3	9/4/2019 12:02	Oxidation Reduction Potention	177.6	mv
GN-GSA-MW-3	9/4/2019 12:02	pH	6.47	pH
GN-GSA-MW-3	9/4/2019 12:02	Temperature	24.81	C
GN-GSA-MW-3	9/4/2019 12:02	Turbidity	3.96	NTU
GN-GSA-MW-3	9/4/2019 12:07	Conductivity	322.25	uS/cm
GN-GSA-MW-3	9/4/2019 12:07	DO	1.4	mg/L
GN-GSA-MW-3	9/4/2019 12:07	Depth to Water Detail	30.95	ft
GN-GSA-MW-3	9/4/2019 12:07	Oxidation Reduction Potention	181.86	mv
GN-GSA-MW-3	9/4/2019 12:07	pH	6.47	pH
GN-GSA-MW-3	9/4/2019 12:07	Temperature	25.58	C
GN-GSA-MW-3	9/4/2019 12:07	Turbidity	3.69	NTU
GN-GSA-MW-3	9/4/2019 12:12	Conductivity	347.53	uS/cm
GN-GSA-MW-3	9/4/2019 12:12	DO	1.1	mg/L
GN-GSA-MW-3	9/4/2019 12:12	Depth to Water Detail	30.45	ft
GN-GSA-MW-3	9/4/2019 12:12	Oxidation Reduction Potention	181.87	mv
GN-GSA-MW-3	9/4/2019 12:12	pH	6.53	pH
GN-GSA-MW-3	9/4/2019 12:12	Temperature	25.72	C
GN-GSA-MW-3	9/4/2019 12:12	Turbidity	3.34	NTU
GN-GSA-MW-3	9/4/2019 12:17	Conductivity	356.27	uS/cm
GN-GSA-MW-3	9/4/2019 12:17	DO	1	mg/L
GN-GSA-MW-3	9/4/2019 12:17	Depth to Water Detail	30.24	ft
GN-GSA-MW-3	9/4/2019 12:17	Oxidation Reduction Potention	181.97	mv
GN-GSA-MW-3	9/4/2019 12:17	pH	6.56	pH
GN-GSA-MW-3	9/4/2019 12:17	Temperature	26.14	C
GN-GSA-MW-3	9/4/2019 12:17	Turbidity	3.7	NTU
GN-GSA-MW-3	9/4/2019 12:22	Conductivity	368.34	uS/cm
GN-GSA-MW-3	9/4/2019 12:22	DO	0.96	mg/L
GN-GSA-MW-3	9/4/2019 12:22	Depth to Water Detail	29.86	ft
GN-GSA-MW-3	9/4/2019 12:22	Oxidation Reduction Potention	182.38	mv
GN-GSA-MW-3	9/4/2019 12:22	pH	6.59	pH
GN-GSA-MW-3	9/4/2019 12:22	Temperature	26.01	C
GN-GSA-MW-3	9/4/2019 12:22	Turbidity	3.67	NTU
GN-GSA-MW-3	9/4/2019 12:27	Conductivity	379.16	uS/cm
GN-GSA-MW-3	9/4/2019 12:27	DO	0.94	mg/L
GN-GSA-MW-3	9/4/2019 12:27	Depth to Water Detail	29.62	ft
GN-GSA-MW-3	9/4/2019 12:27	Oxidation Reduction Potention	182.72	mv
GN-GSA-MW-3	9/4/2019 12:27	pH	6.61	pH
GN-GSA-MW-3	9/4/2019 12:27	Temperature	26.91	C
GN-GSA-MW-3	9/4/2019 12:27	Turbidity	3.45	NTU
GN-GSA-MW-3	9/4/2019 12:32	Conductivity	398.08	uS/cm
GN-GSA-MW-3	9/4/2019 12:32	DO	0.93	mg/L
GN-GSA-MW-3	9/4/2019 12:32	Depth to Water Detail	29.42	ft
GN-GSA-MW-3	9/4/2019 12:32	Oxidation Reduction Potention	182.41	mv

**Alabama Power Company**  
**Plant Gaston Gypsum Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-3	9/4/2019 12:32	pH	6.67	pH
GN-GSA-MW-3	9/4/2019 12:32	Temperature	26.26	C
GN-GSA-MW-3	9/4/2019 12:32	Turbidity	3.48	NTU
GN-GSA-MW-3	9/4/2019 12:37	Conductivity	407.74	uS/cm
GN-GSA-MW-3	9/4/2019 12:37	DO	0.93	mg/L
GN-GSA-MW-3	9/4/2019 12:37	Depth to Water Detail	29.29	ft
GN-GSA-MW-3	9/4/2019 12:37	Oxidation Reduction Potention	182.59	mv
GN-GSA-MW-3	9/4/2019 12:37	pH	6.7	pH
GN-GSA-MW-3	9/4/2019 12:37	Temperature	26.22	C
GN-GSA-MW-3	9/4/2019 12:37	Turbidity	3.54	NTU
GN-GSA-MW-3	9/4/2019 12:42	Conductivity	408.8	uS/cm
GN-GSA-MW-3	9/4/2019 12:42	DO	0.94	mg/L
GN-GSA-MW-3	9/4/2019 12:42	Depth to Water Detail	29.15	ft
GN-GSA-MW-3	9/4/2019 12:42	Oxidation Reduction Potention	183.59	mv
GN-GSA-MW-3	9/4/2019 12:42	pH	6.71	pH
GN-GSA-MW-3	9/4/2019 12:42	Temperature	26.1	C
GN-GSA-MW-3	9/4/2019 12:42	Turbidity	3.81	NTU

# Appendix C

1st

Semi-Annual

Monitoring Event

# Interwell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 6/26/2019, 11:04 AM

Constituent

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
pH (pH)	GN-GSA-MW-6	7.53	5.81	5/20/2019	4.59	Yes	52	0	n/a	0.001371	NP Inter (normality) ...

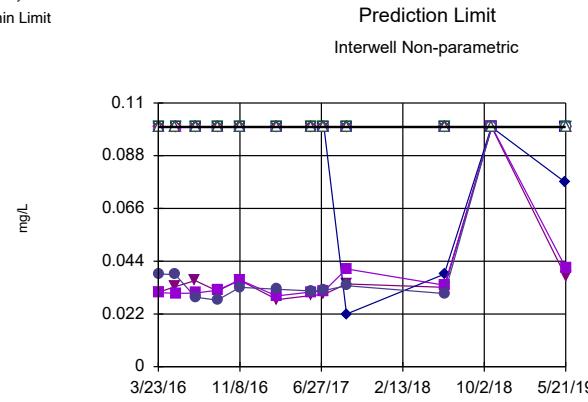
# Interwell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 6/26/2019, 11:04 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GN-GSA-MW-1	0.1	n/a	5/21/2019	0.0376	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-5	0.1	n/a	5/20/2019	0.0769	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-6	0.1	n/a	5/20/2019	0.1ND	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-7	0.1	n/a	5/20/2019	0.1ND	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-8	0.1	n/a	5/21/2019	0.1ND	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-9	0.1	n/a	5/21/2019	0.1ND	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-10	0.1	n/a	5/21/2019	0.1ND	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-11	0.1	n/a	5/21/2019	0.0413	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-12	0.1	n/a	5/21/2019	0.1ND	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-13	0.1	n/a	5/21/2019	0.1ND	No	48	97.92	n/a	0.000...	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-1	0.3	n/a	5/21/2019	0.264	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-5	0.3	n/a	5/20/2019	0.0842	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-6	0.3	n/a	5/20/2019	0.1ND	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-7	0.3	n/a	5/20/2019	0.0919	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-8	0.3	n/a	5/21/2019	0.109	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-9	0.3	n/a	5/21/2019	0.0526	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-10	0.3	n/a	5/21/2019	0.1ND	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-11	0.3	n/a	5/21/2019	0.1ND	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-12	0.3	n/a	5/21/2019	0.0649	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-13	0.3	n/a	5/21/2019	0.0595	No	52	36.54	n/a	0.000...	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-1	7.53	5.81	5/21/2019	7.5	No	52	0	n/a	0.001371	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-5	7.53	5.81	5/20/2019	6.59	No	52	0	n/a	0.001371	NP Inter (normality) ...
<b>pH (pH)</b>	<b>GN-GSA-MW-6</b>	<b>7.53</b>	<b>5.81</b>	<b>5/20/2019</b>	<b>4.59</b>	<b>Yes</b>	<b>52</b>	<b>0</b>	<b>n/a</b>	<b>0.001371</b>	<b>NP Inter (normality) ...</b>
pH (pH)	GN-GSA-MW-7	7.53	5.81	5/20/2019	6.81	No	52	0	n/a	0.001371	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-8	7.53	5.81	5/21/2019	7.31	No	52	0	n/a	0.001371	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-9	7.53	5.81	5/21/2019	6.79	No	52	0	n/a	0.001371	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-10	7.53	5.81	5/21/2019	6.98	No	52	0	n/a	0.001371	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-11	7.53	5.81	5/21/2019	5.97	No	52	0	n/a	0.001371	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-12	7.53	5.81	5/21/2019	7.1	No	52	0	n/a	0.001371	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-13	7.53	5.81	5/21/2019	7.05	No	52	0	n/a	0.001371	NP Inter (normality) ...

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Hollow symbols indicate censored values.

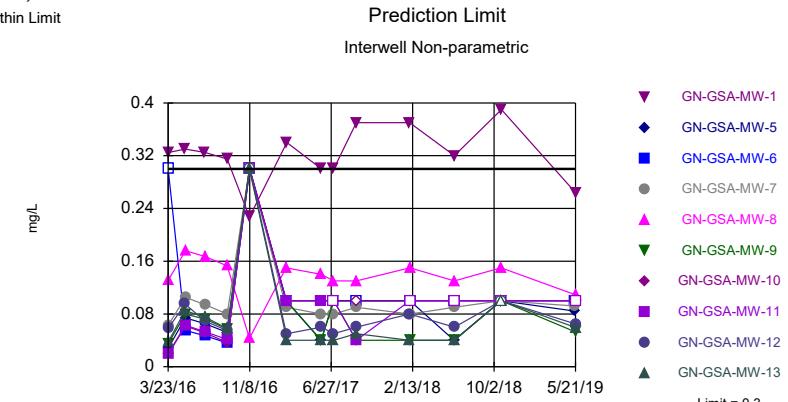
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 48 background values. 97.92% NDs. Annual per-constituent alpha = 0.01751. Individual comparison alpha = 0.0008027 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

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Hollow symbols indicate censored values.

Within Limit



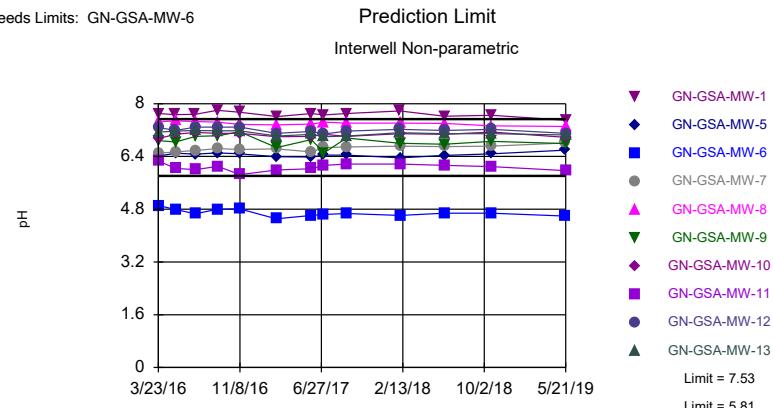
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 52 background values. 36.54% NDs. Annual per-constituent alpha = 0.01497. Individual comparison alpha = 0.0006854 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

Constituent: Boron Analysis Run 6/26/2019 11:03 AM View: PLs - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Fluoride Analysis Run 6/26/2019 11:03 AM View: PLs - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Exceeds Limits: GN-GSA-MW-6



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. Limits are highest and lowest of 52 background values. Annual per-constituent alpha = 0.02994. Individual comparison alpha = 0.001371 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

Constituent: pH Analysis Run 6/26/2019 11:03 AM View: PLs - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

# Intrawell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 6/26/2019, 11:02 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GN-GSA-MW-1	38.37	n/a	5/21/2019	47.8	Yes	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW-7	72.45	n/a	5/20/2019	72.5	Yes	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW-10	99.41	n/a	5/21/2019	100	Yes	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW-12	75.87	n/a	5/21/2019	77.9	Yes	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW-13	96.63	n/a	5/21/2019	106	Yes	9	0	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-11	6.745	n/a	5/21/2019	10.4	Yes	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-5	31.02	n/a	5/20/2019	75.6	Yes	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-8	2.629	n/a	5/21/2019	3.39	Yes	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-1	242.9	n/a	5/21/2019	244	Yes	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-5	269.4	n/a	5/20/2019	398	Yes	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-6	30	n/a	5/20/2019	30.7	Yes	9	66.67	n/a	0.004675	NP Intra (NDs) 1 of 3
TDS (mg/L)	GN-GSA-MW-10	267.8	n/a	5/21/2019	276	Yes	9	0	No	0.000...	Param Intra 1 of 3

# Intrawell Prediction Limits - All Results

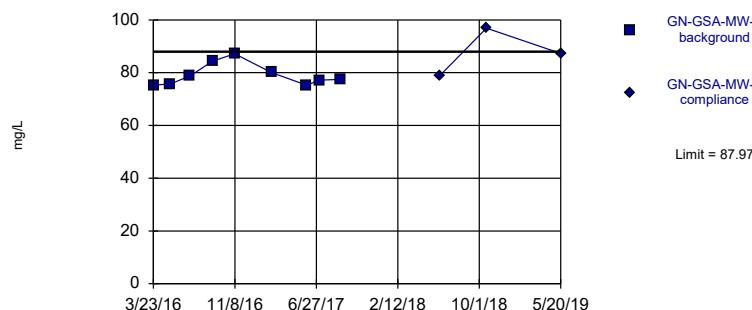
Plant Gaston Client: Southern Company Data: Gaston GSA Printed 6/26/2019, 11:02 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-2	87.97	n/a	5/20/2019	87.3	No	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW-3	114.2	n/a	5/22/2019	53.1	No	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW...	56.07	n/a	5/22/2019	47.1	No	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW-15	10.8	n/a	5/22/2019	6.34	No	9	0	No	0.000...	Param Intra 1 of 3
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>38.37</b>	<b>n/a</b>	<b>5/21/2019</b>	<b>47.8</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
Calcium (mg/L)	GN-GSA-MW-5	65.71	n/a	5/20/2019	58.8	No	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW-6	1.54	n/a	5/20/2019	0.665	No	9	0	No	0.000...	Param Intra 1 of 3
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-7</b>	<b>72.45</b>	<b>n/a</b>	<b>5/20/2019</b>	<b>72.5</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
Calcium (mg/L)	GN-GSA-MW-8	61.65	n/a	5/21/2019	55.7	No	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GN-GSA-MW-9	67.03	n/a	5/21/2019	51.6	No	9	0	No	0.000...	Param Intra 1 of 3
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-10</b>	<b>99.41</b>	<b>n/a</b>	<b>5/21/2019</b>	<b>100</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
Calcium (mg/L)	GN-GSA-MW-11	15.57	n/a	5/21/2019	11.7	No	9	0	No	0.000...	Param Intra 1 of 3
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>75.87</b>	<b>n/a</b>	<b>5/21/2019</b>	<b>77.9</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-13</b>	<b>96.63</b>	<b>n/a</b>	<b>5/21/2019</b>	<b>106</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
Chloride (mg/L)	GN-GSA-MW-2	4.891	n/a	5/20/2019	3.53	No	9	0	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-3	3.86	n/a	5/22/2019	2.83	No	9	0	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW...	5.523	n/a	5/22/2019	2.89	No	9	0	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-15	4.666	n/a	5/22/2019	1.75	No	9	11.11	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-1	4.011	n/a	5/21/2019	2.6	No	9	11.11	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-5	17	n/a	5/20/2019	12.9	No	9	0	n/a	0.004675	NP Intra (normality) ...
Chloride (mg/L)	GN-GSA-MW-6	4.015	n/a	5/20/2019	3.16	No	9	11.11	x^2	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-7	4.538	n/a	5/20/2019	3.25	No	9	0	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-8	2.587	n/a	5/21/2019	1.51	No	9	11.11	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-9	3.528	n/a	5/21/2019	2.12	No	9	11.11	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-10	4.197	n/a	5/21/2019	2.97	No	9	11.11	No	0.000...	Param Intra 1 of 3
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>6.745</b>	<b>n/a</b>	<b>5/21/2019</b>	<b>10.4</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
Chloride (mg/L)	GN-GSA-MW-12	5.623	n/a	5/21/2019	3.02	No	9	11.11	No	0.000...	Param Intra 1 of 3
Chloride (mg/L)	GN-GSA-MW-13	5.021	n/a	5/21/2019	3.3	No	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-2	10.62	n/a	5/20/2019	7.52	No	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-3	35.15	n/a	5/22/2019	11	No	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW...	18.04	n/a	5/22/2019	5.57	No	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-15	5.604	n/a	5/22/2019	2.82	No	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-1	6.414	n/a	5/21/2019	4.58	No	9	0	No	0.000...	Param Intra 1 of 3
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>31.02</b>	<b>n/a</b>	<b>5/20/2019</b>	<b>75.6</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
Sulfate (mg/L)	GN-GSA-MW-6	4.369	n/a	5/20/2019	0.5ND	No	9	22.22	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-7	14.51	n/a	5/20/2019	6.85	No	9	0	No	0.000...	Param Intra 1 of 3
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>2.629</b>	<b>n/a</b>	<b>5/21/2019</b>	<b>3.39</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
Sulfate (mg/L)	GN-GSA-MW-9	6.386	n/a	5/21/2019	6.07	No	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-10	2.582	n/a	5/21/2019	1.7	No	9	11.11	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-11	15.03	n/a	5/21/2019	3.55	No	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-12	16.55	n/a	5/21/2019	7.81	No	9	0	No	0.000...	Param Intra 1 of 3
Sulfate (mg/L)	GN-GSA-MW-13	10.47	n/a	5/21/2019	8.29	No	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-2	311.1	n/a	5/20/2019	286	No	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-3	355.7	n/a	5/22/2019	184	No	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW...	228.5	n/a	5/22/2019	202	No	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-15	60.28	n/a	5/22/2019	35.3	No	9	0	No	0.000...	Param Intra 1 of 3
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>242.9</b>	<b>n/a</b>	<b>5/21/2019</b>	<b>244</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
TDS (mg/L)	<b>GN-GSA-MW-5</b>	<b>269.4</b>	<b>n/a</b>	<b>5/20/2019</b>	<b>398</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-6</b>	<b>30</b>	<b>n/a</b>	<b>5/20/2019</b>	<b>30.7</b>	<b>Yes</b>	<b>9</b>	<b>66.67</b>	<b>n/a</b>	<b>0.004675</b>	<b>NP Intra (NDs) 1 of 3</b>
TDS (mg/L)	GN-GSA-MW-7	255.2	n/a	5/20/2019	218	No	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-8	204.3	n/a	5/21/2019	185	No	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-9	212.4	n/a	5/21/2019	176	No	9	0	No	0.000...	Param Intra 1 of 3
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-10</b>	<b>267.8</b>	<b>n/a</b>	<b>5/21/2019</b>	<b>276</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 3</b>
TDS (mg/L)	GN-GSA-MW-11	112.4	n/a	5/21/2019	66	No	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-12	275.9	n/a	5/21/2019	231	No	9	0	No	0.000...	Param Intra 1 of 3
TDS (mg/L)	GN-GSA-MW-13	333.9	n/a	5/21/2019	286	No	9	0	No	0.000...	Param Intra 1 of 3

Within Limit

## Prediction Limit

Intrawell Parametric

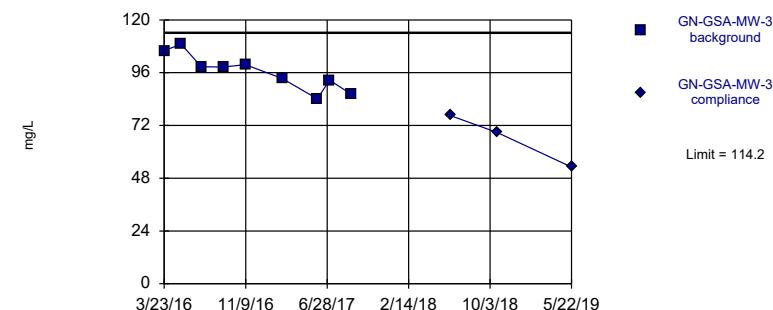


Background Data Summary: Mean=79.02, Std. Dev.=4.196, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8568, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=96.47, Std. Dev.=8.312, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9589, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

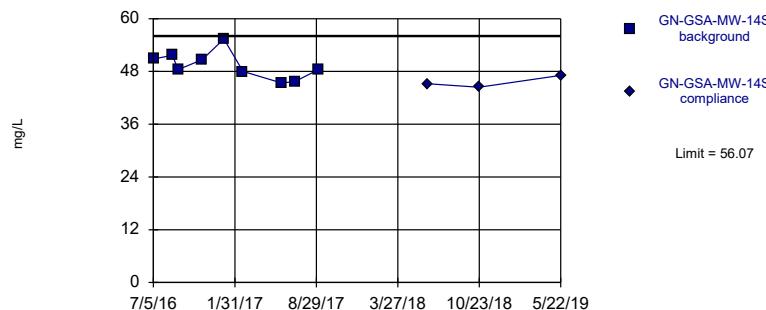
Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

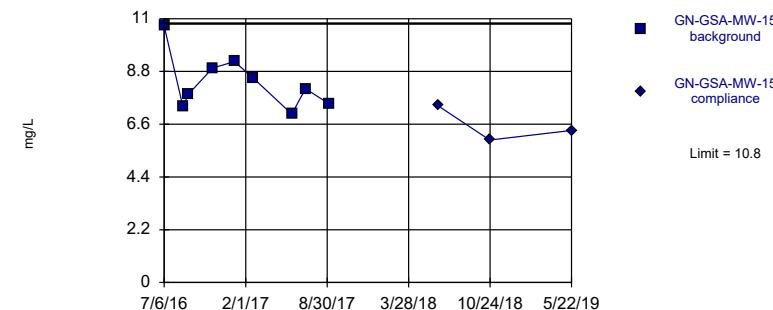


Background Data Summary: Mean=49.4, Std. Dev.=3.13, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9446, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.347, Std. Dev.=1.15, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

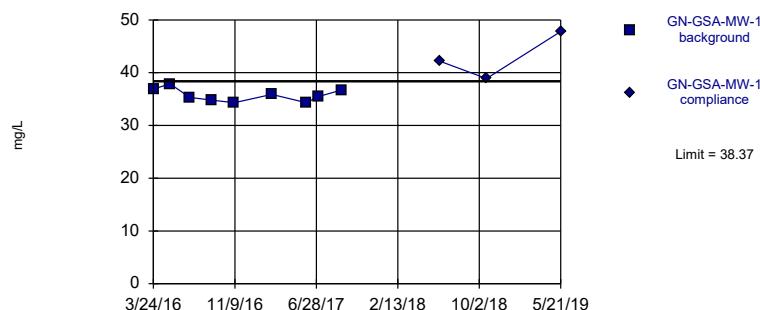
Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

## Prediction Limit

Intrawell Parametric

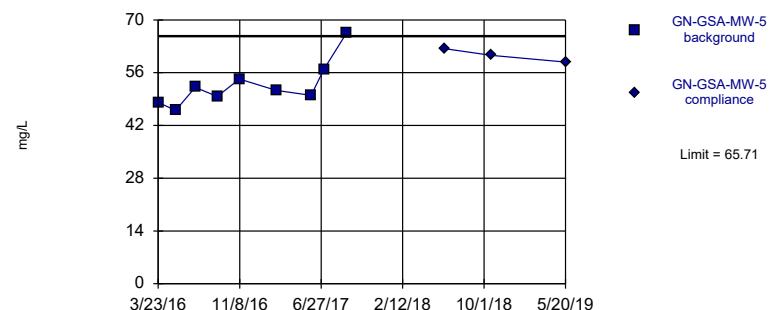


Background Data Summary: Mean=35.73, Std. Dev.=1.237, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9419, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=52.77, Std. Dev.=6.075, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8706, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

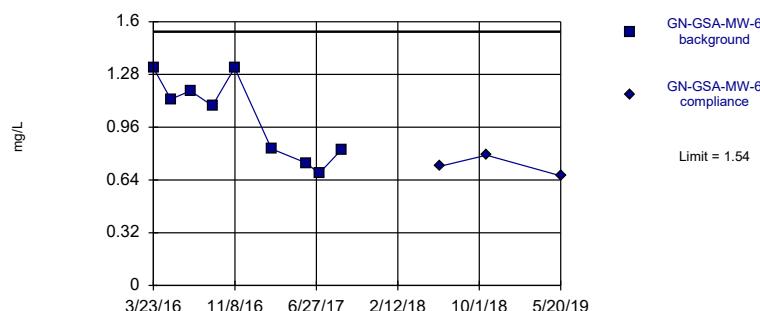
Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

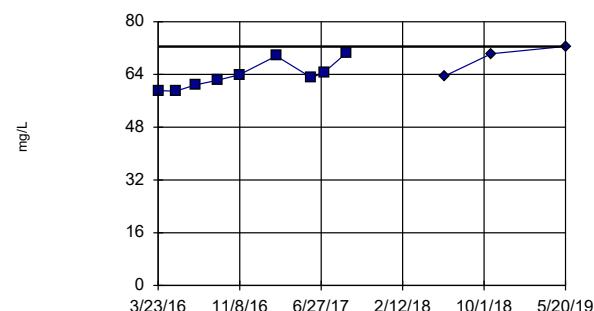


Background Data Summary: Mean=1.013, Std. Dev.=0.2472, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.898, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Exceeds Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=63.62, Std. Dev.=4.141, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9059, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

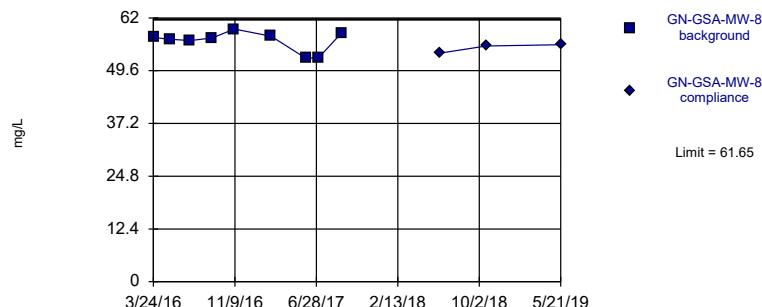
Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

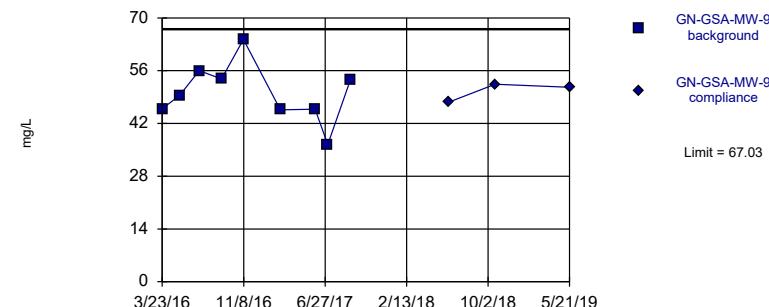


Background Data Summary: Mean=56.57, Std. Dev.=2.387, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8287, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=50.08, Std. Dev.=7.955, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9649, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

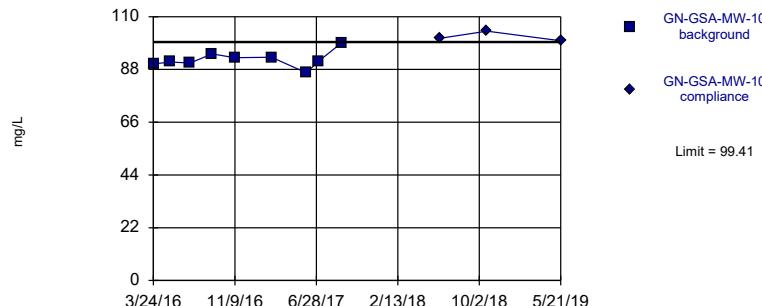
Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

## Prediction Limit

Intrawell Parametric

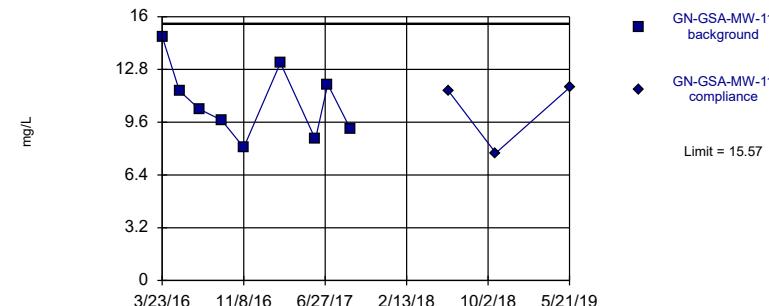


Background Data Summary: Mean=92.19, Std. Dev.=3.387, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9444, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



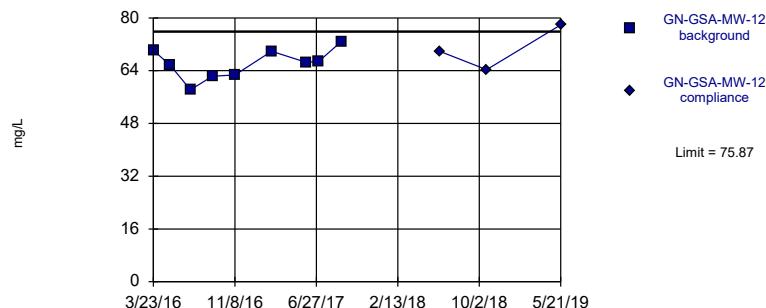
Background Data Summary: Mean=10.82, Std. Dev.=2.23, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9564, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

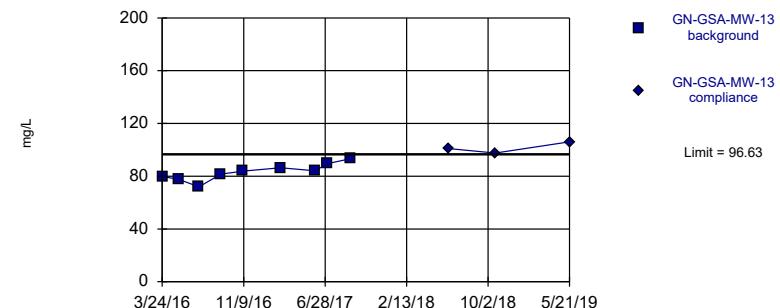
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=66.13, Std. Dev.=4.568, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9759, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Exceeds Limit

**Prediction Limit**  
Intrawell Parametric



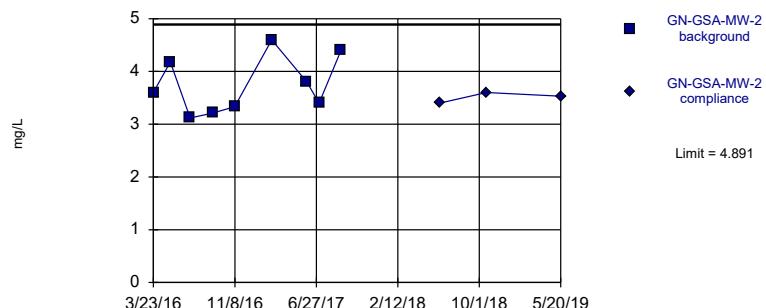
Background Data Summary: Mean=83.12, Std. Dev.=6.337, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9932, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

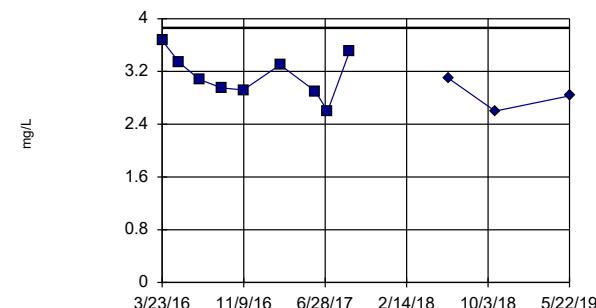
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=3.738, Std. Dev.=0.5409, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9147, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

**Prediction Limit**  
Intrawell Parametric

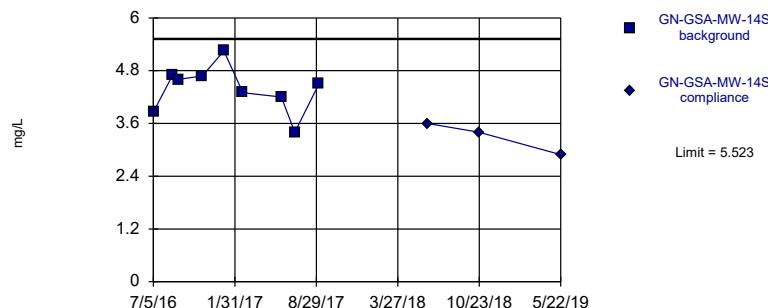


Background Data Summary: Mean=3.14, Std. Dev.=0.3379, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.969, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric

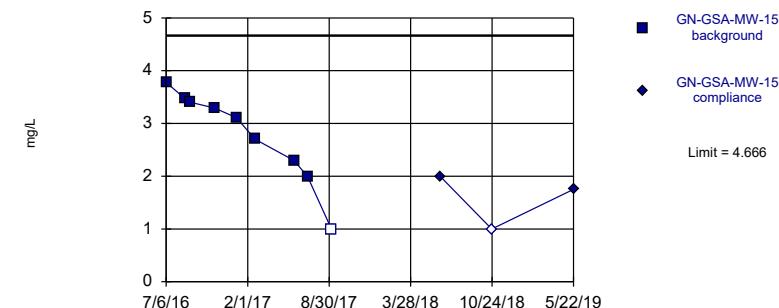


Background Data Summary: Mean=4.387, Std. Dev.=0.5333, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9651, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.783, Std. Dev.=0.8834, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9126, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

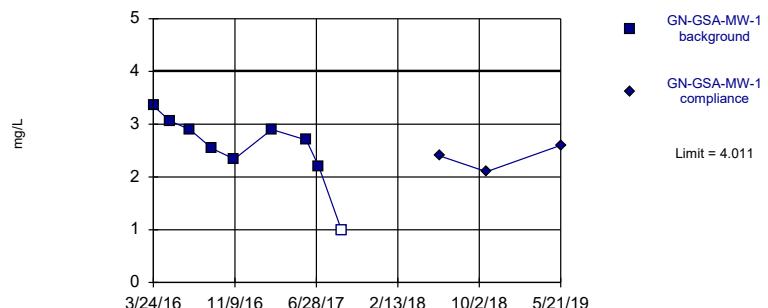
Constituent: Chloride Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Chloride Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

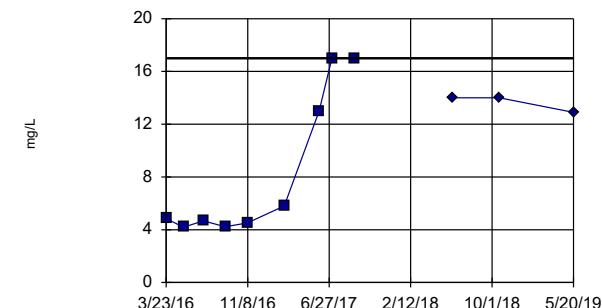


Background Data Summary: Mean=2.554, Std. Dev.=0.6834, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8742, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chloride Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

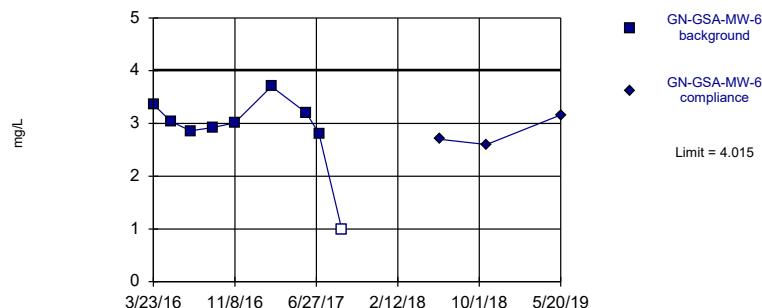
Constituent: Chloride Analysis Run 6/26/2019 10:59 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



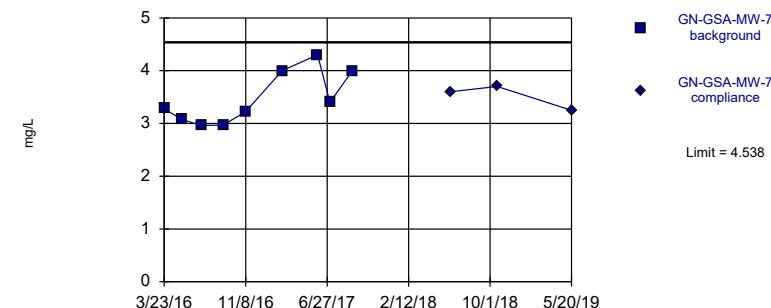
Background Data Summary (based on square transformation): Mean=8.785, Std. Dev.=3.44, n=9, 11.11% NDs.  
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8682, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3.468, Std. Dev.=0.502, n=9, Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8667, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

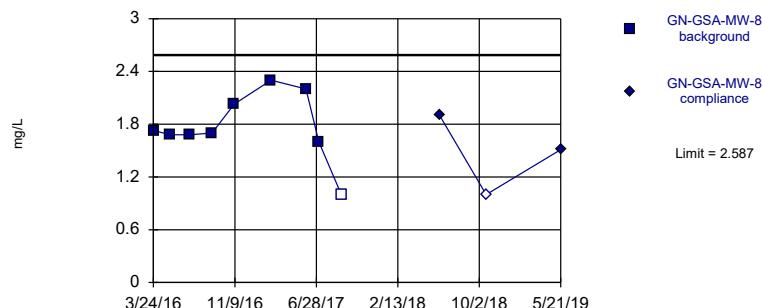
Constituent: Chloride Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



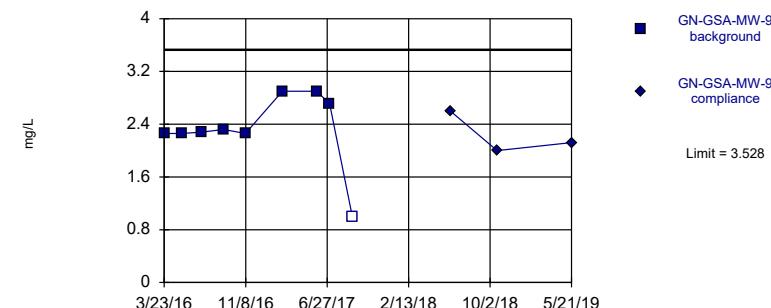
Background Data Summary: Mean=1.769, Std. Dev.=0.3837, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9076, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.32, Std. Dev.=0.567, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7828, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

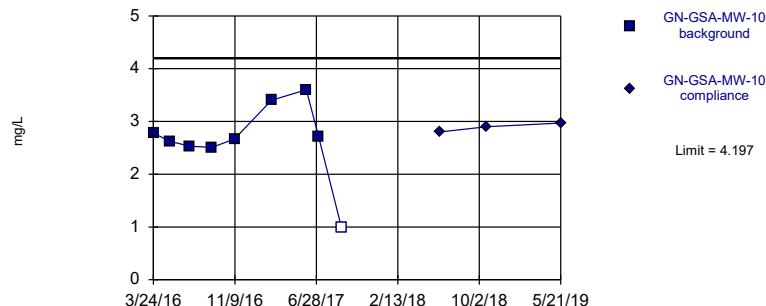
Constituent: Chloride Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Chloride Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

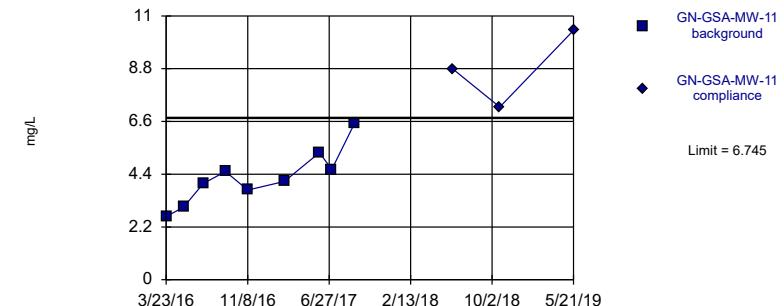


Background Data Summary: Mean=2.646, Std. Dev.=0.7282, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8302, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Exceeds Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=4.269, Std. Dev.=1.162, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9661, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

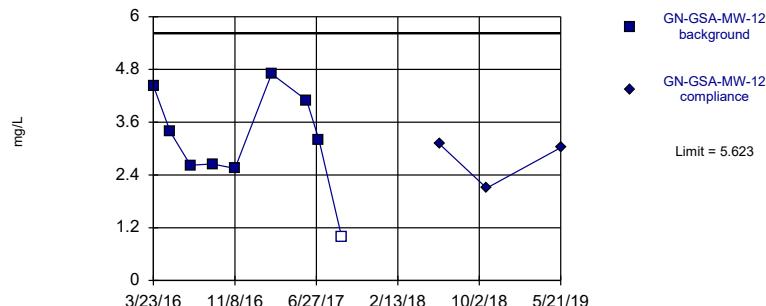
Constituent: Chloride Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Chloride Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

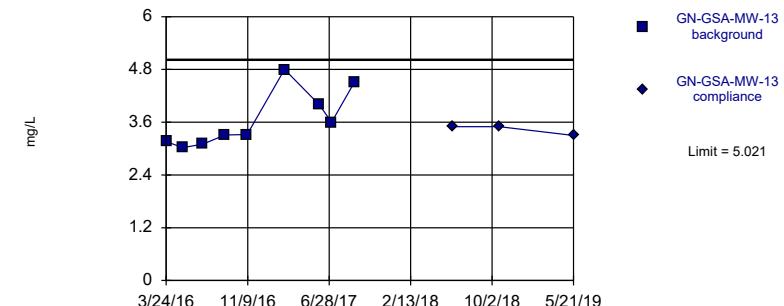


Background Data Summary: Mean=3.181, Std. Dev.=1.146, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9447, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Within Limit

Prediction Limit  
Intrawell Parametric



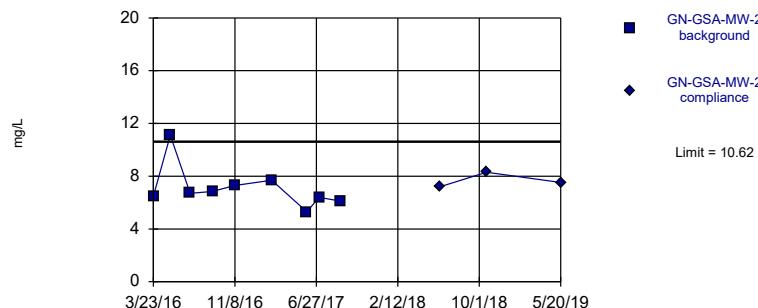
Background Data Summary: Mean=3.646, Std. Dev.=0.6455, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8625, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Chloride Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

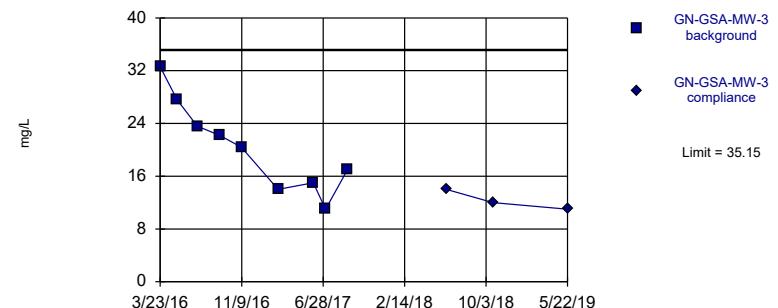
Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=7.103, Std. Dev.=1.648, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7912, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

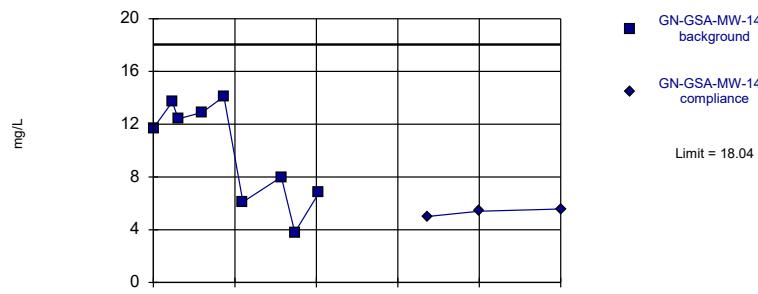
Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=20.38, Std. Dev.=6.93, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9717, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=9.944, Std. Dev.=3.798, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8929, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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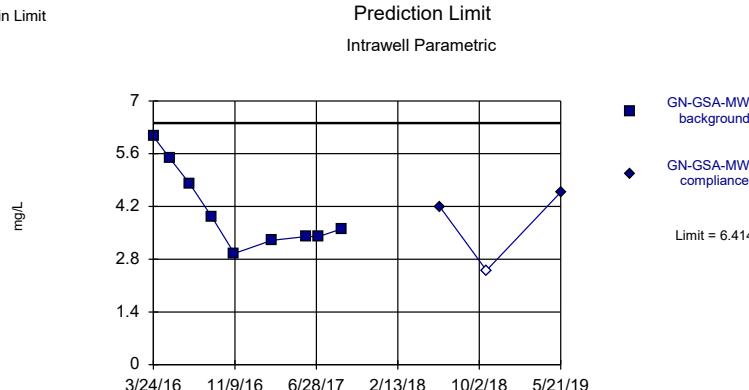
Within Limit

Prediction Limit  
Intrawell Parametric



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Hollow symbols indicate censored values.

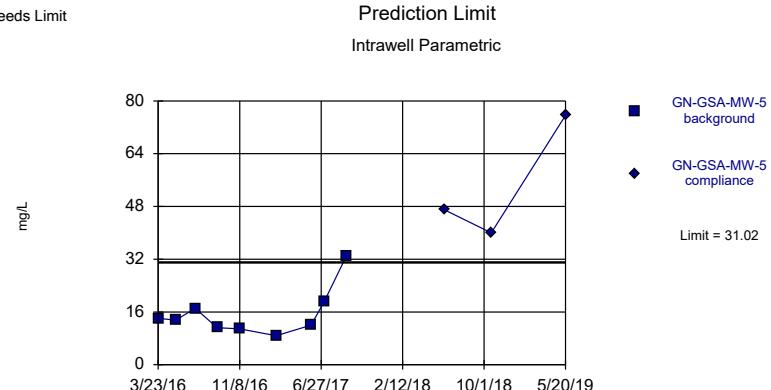
Within Limit



Background Data Summary: Mean=4.099, Std. Dev.=1.086, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8668, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Exceeds Limit



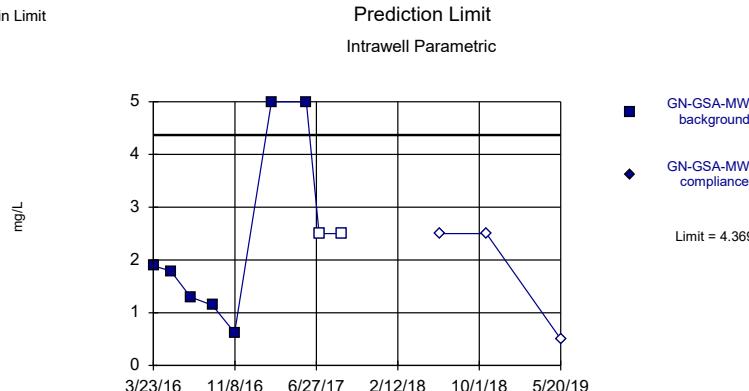
Background Data Summary: Mean=15.51, Std. Dev.=7.278, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7851, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

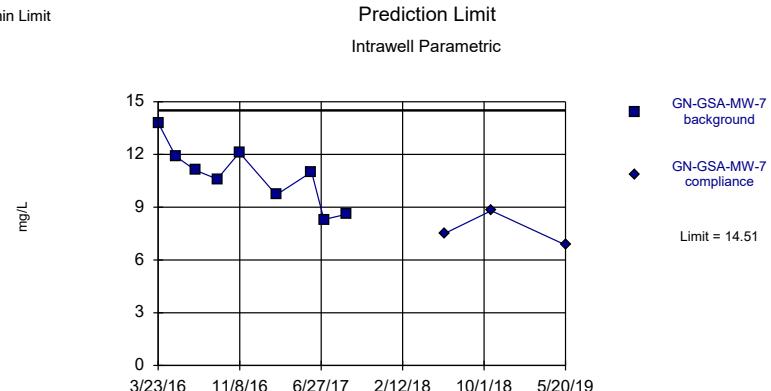
Within Limit



Background Data Summary (after Kaplan-Meier Adjustment): Mean=1.754, Std. Dev.=1.227, n=9, 22.22% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8492, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Within Limit



Background Data Summary: Mean=10.79, Std. Dev.=1.745, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

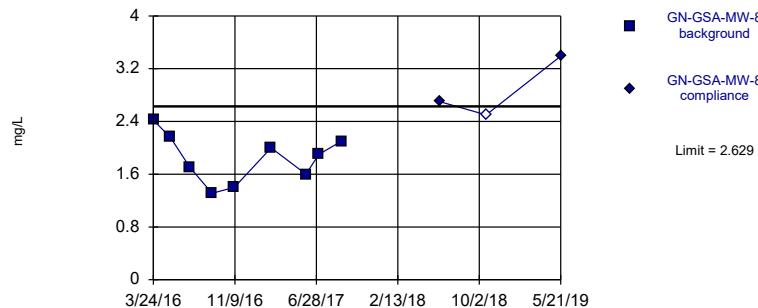
Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit  
Intrawell Parametric

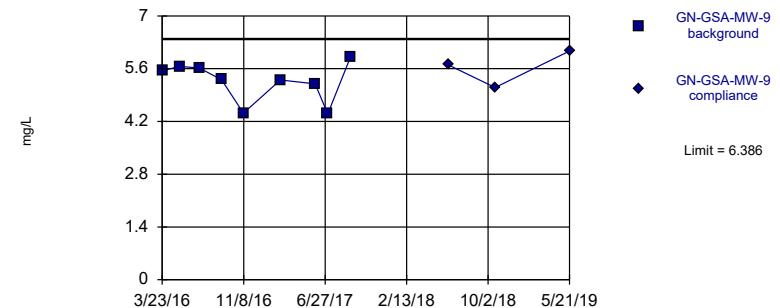


Background Data Summary: Mean=1.843, Std. Dev.=0.3686, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9707, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=5.261, Std. Dev.=0.528, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8677, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

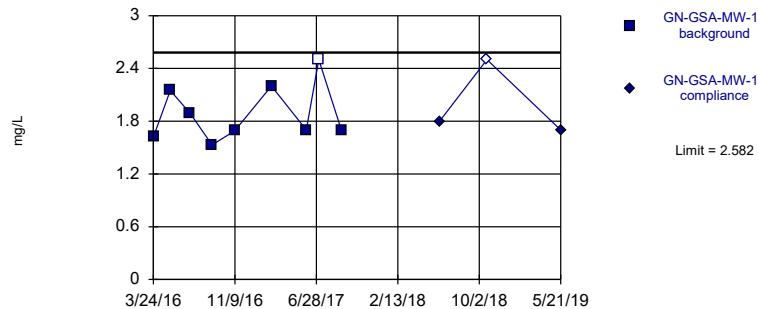
Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

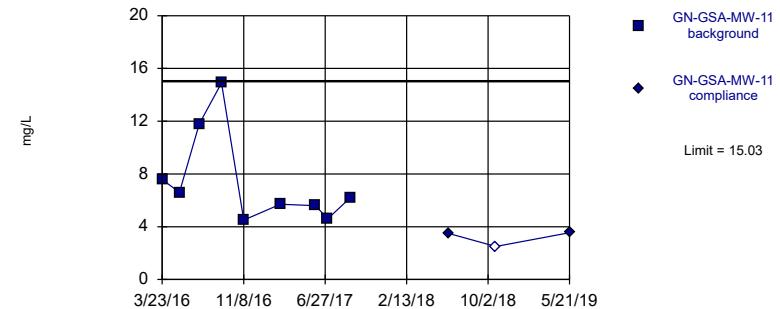


Background Data Summary: Mean=1.887, Std. Dev.=0.326, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8863, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=7.499, Std. Dev.=3.536, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7987, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

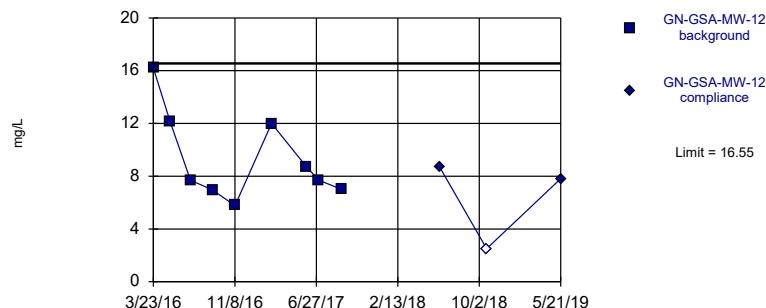
Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

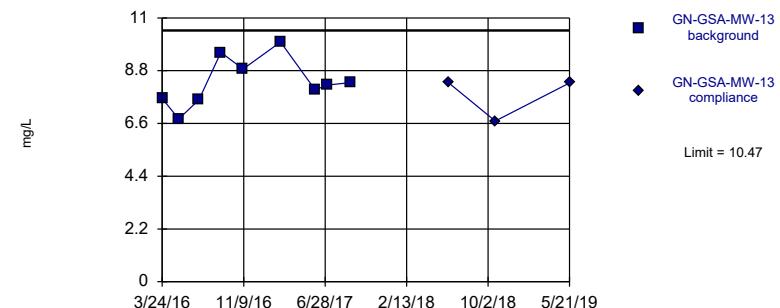


Background Data Summary: Mean=9.349, Std. Dev.=3.38, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8645, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=8.328, Std. Dev.=1.007, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9665, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

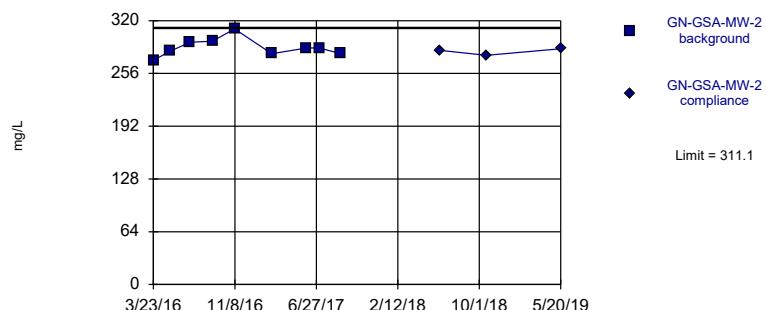
Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Within Limit

Prediction Limit  
Intrawell Parametric

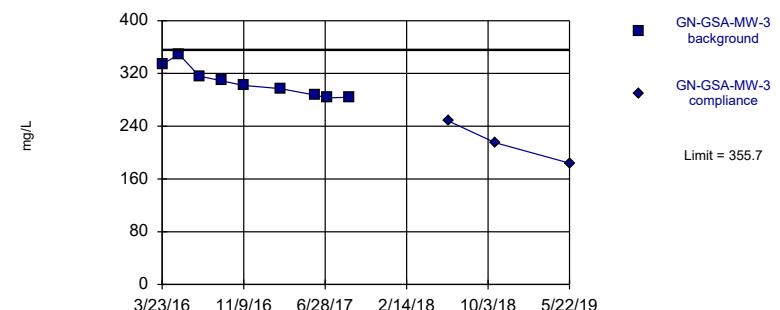


Background Data Summary: Mean=287.6, Std. Dev.=11.06, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9438, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=306.8, Std. Dev.=22.93, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9121, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

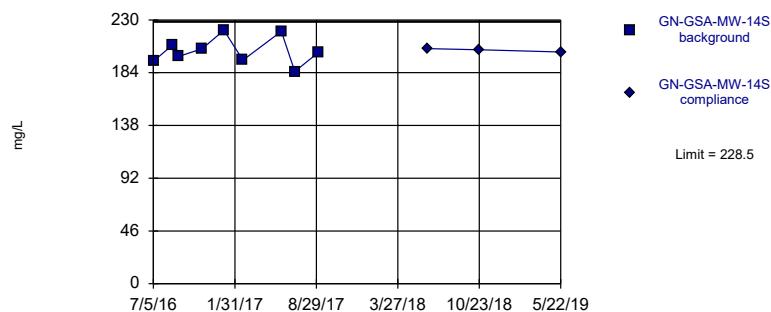
Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

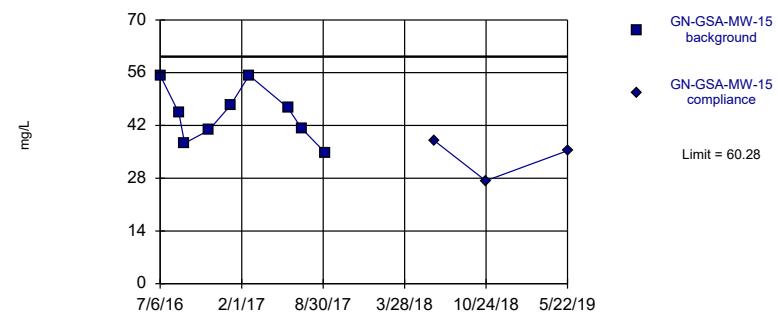


Background Data Summary: Mean=203.1, Std. Dev.=11.92, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9499, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=44.88, Std. Dev.=7.227, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9367, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

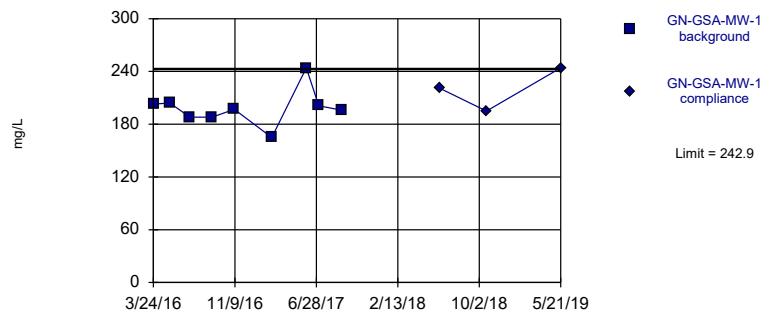
Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

## Prediction Limit

Intrawell Parametric

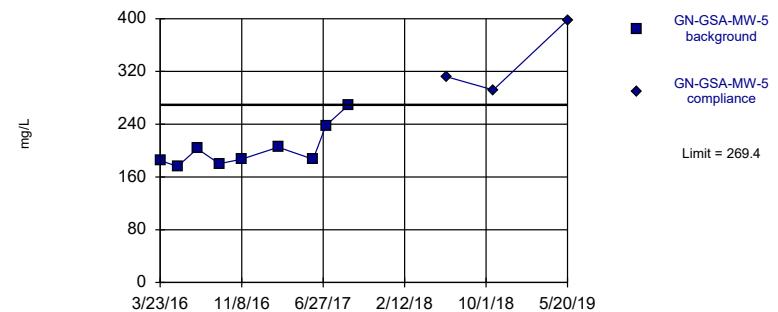


Background Data Summary: Mean=198.4, Std. Dev.=20.85, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8742, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Exceeds Limit

## Prediction Limit

Intrawell Parametric



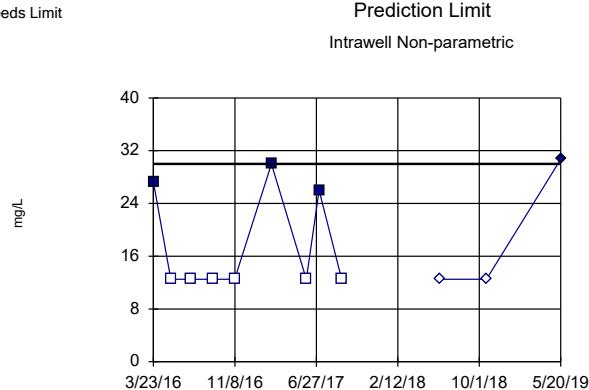
Background Data Summary: Mean=203.3, Std. Dev.=30.98, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8137, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

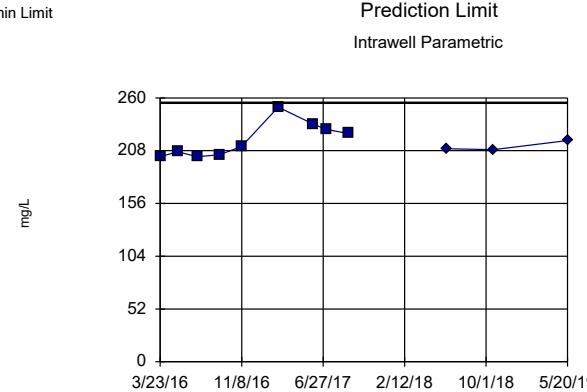
Exceeds Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

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Within Limit



Background Data Summary: Mean=218.4, Std. Dev.=17.24, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

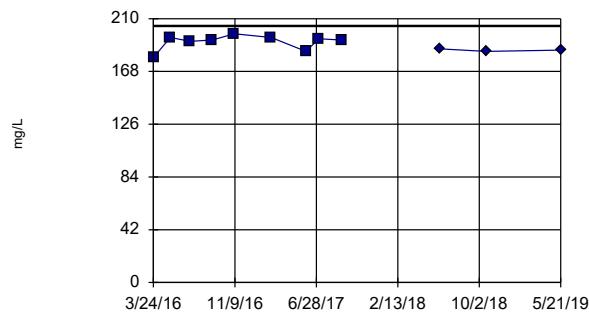
Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Within Limit

Prediction Limit  
Intrawell Parametric

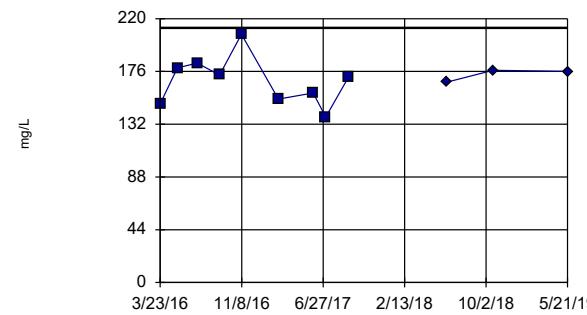


Background Data Summary: Mean=191.4, Std. Dev.=6.023, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8217, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

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Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=167.9, Std. Dev.=20.88, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9719, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

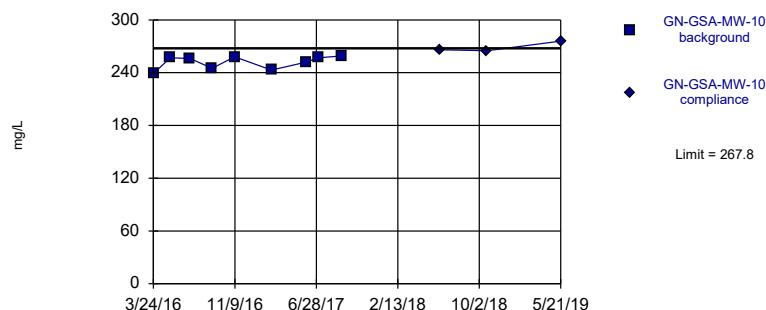
Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

## Prediction Limit

Intrawell Parametric

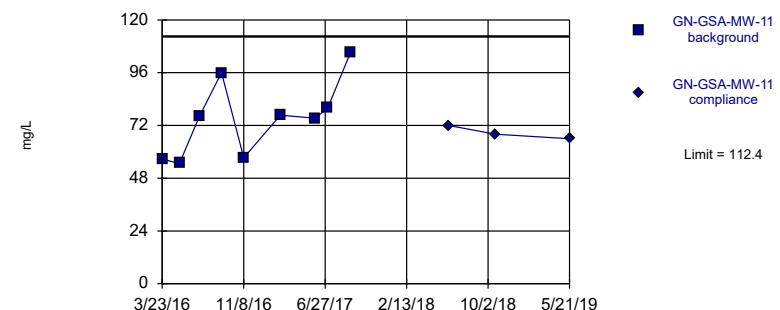


Background Data Summary: Mean=251.8, Std. Dev.=7.496, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8447, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=75.3, Std. Dev.=17.43, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9086, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

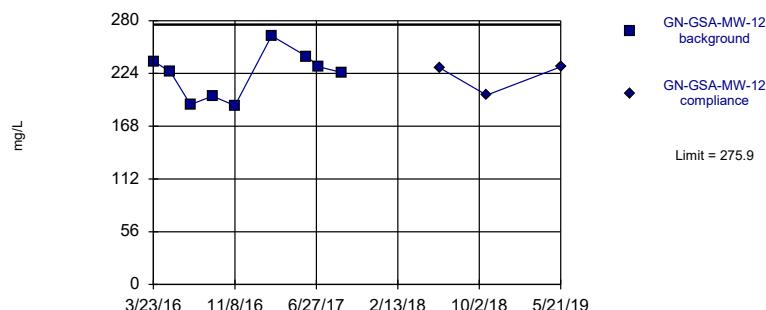
Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

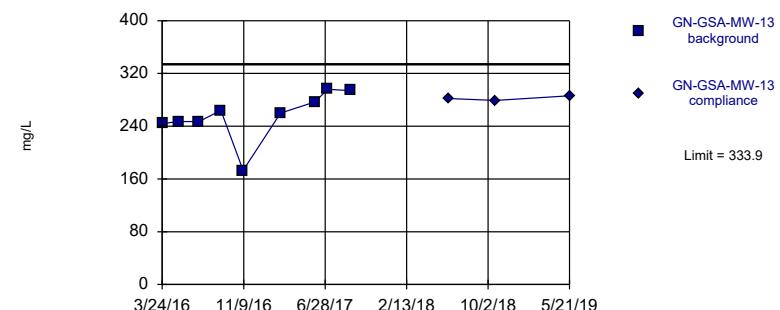


Background Data Summary: Mean=222.9, Std. Dev.=24.89, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9327, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Within Limit

## Prediction Limit

Intrawell Parametric



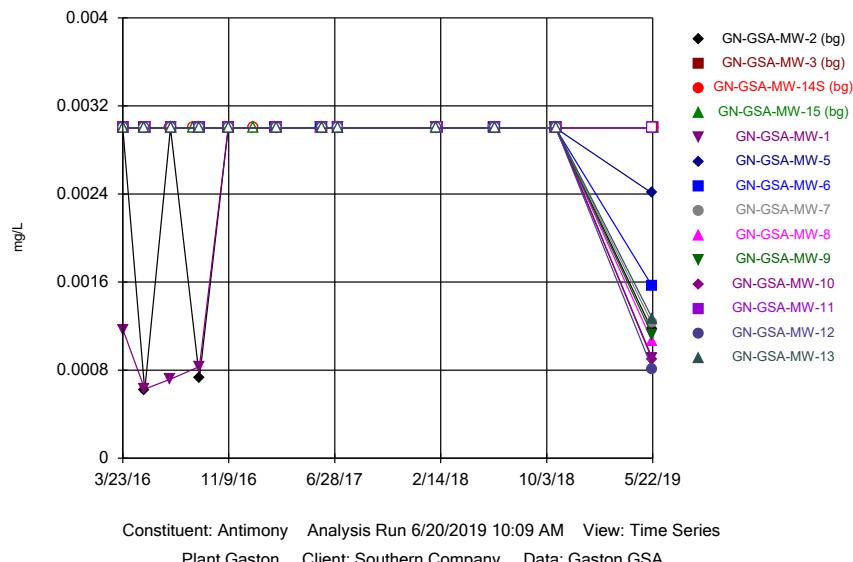
Background Data Summary: Mean=255.8, Std. Dev.=36.67, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8598, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 6/26/2019 11:00 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 6/26/2019 11:01 AM View: PLs - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

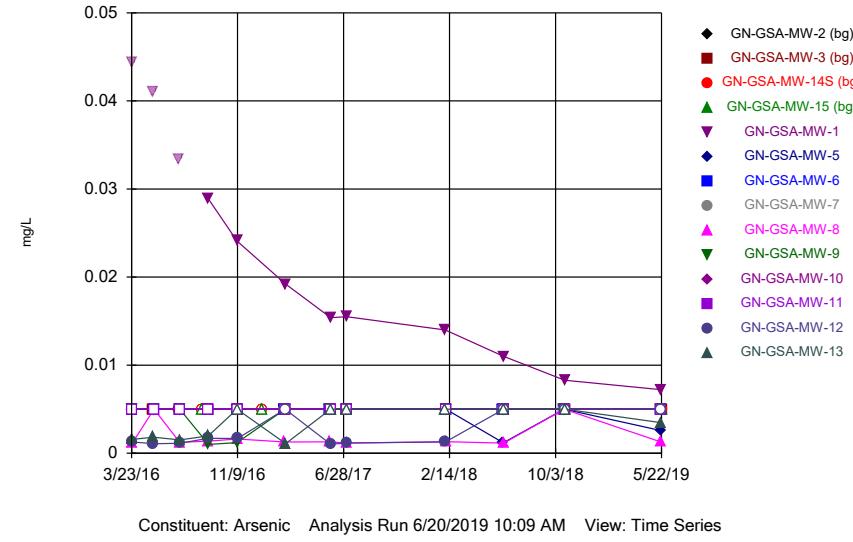
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



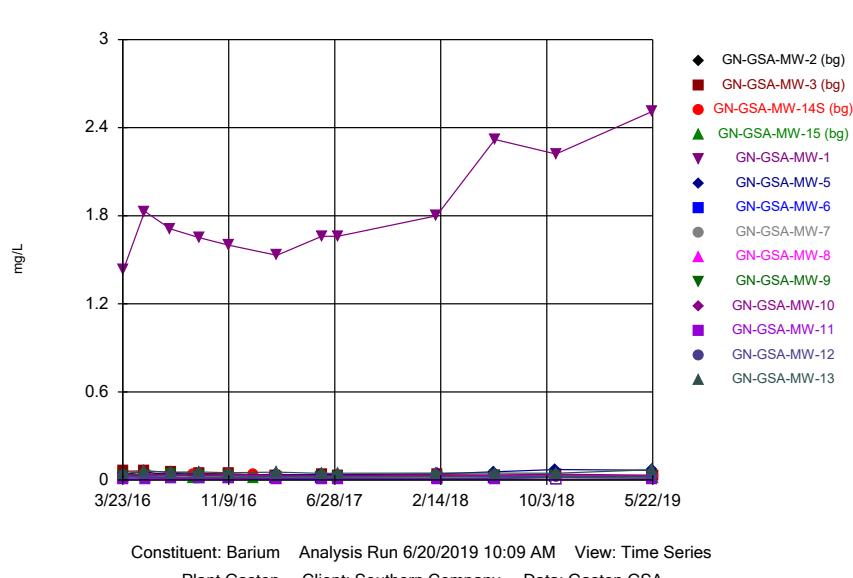
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



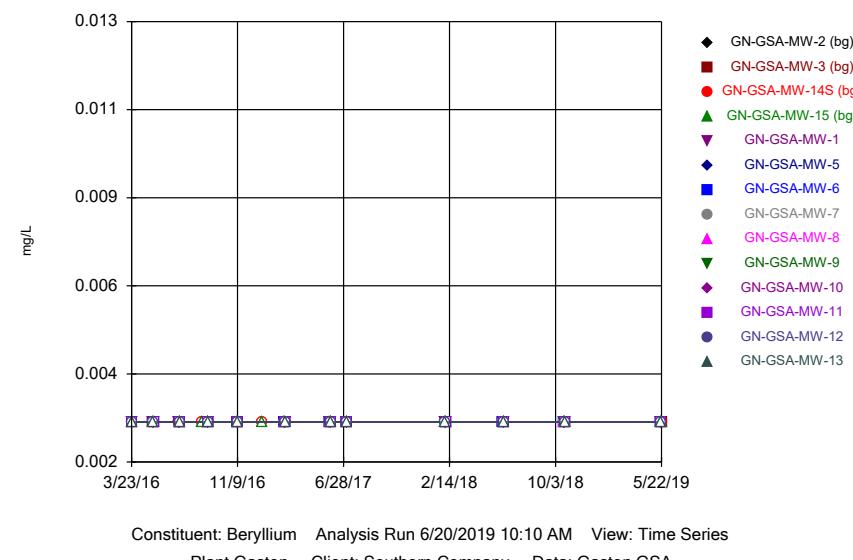
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



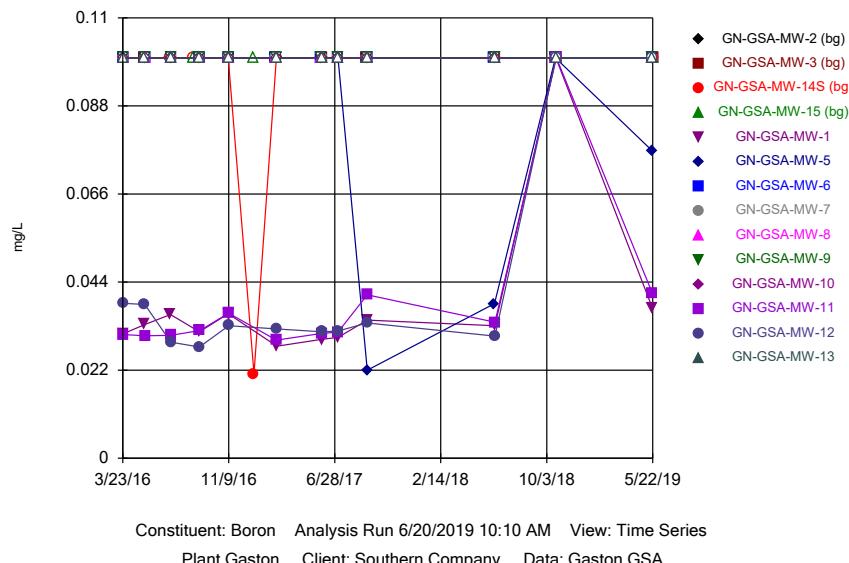
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



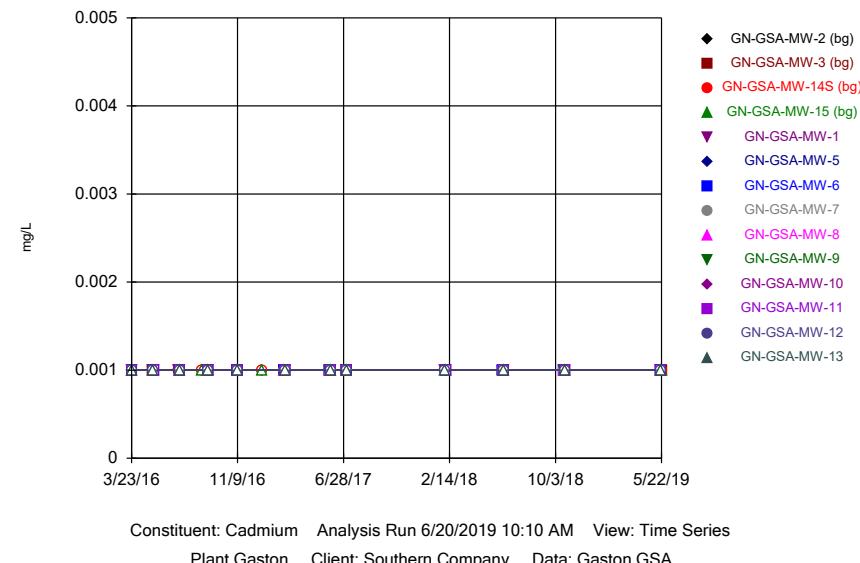
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



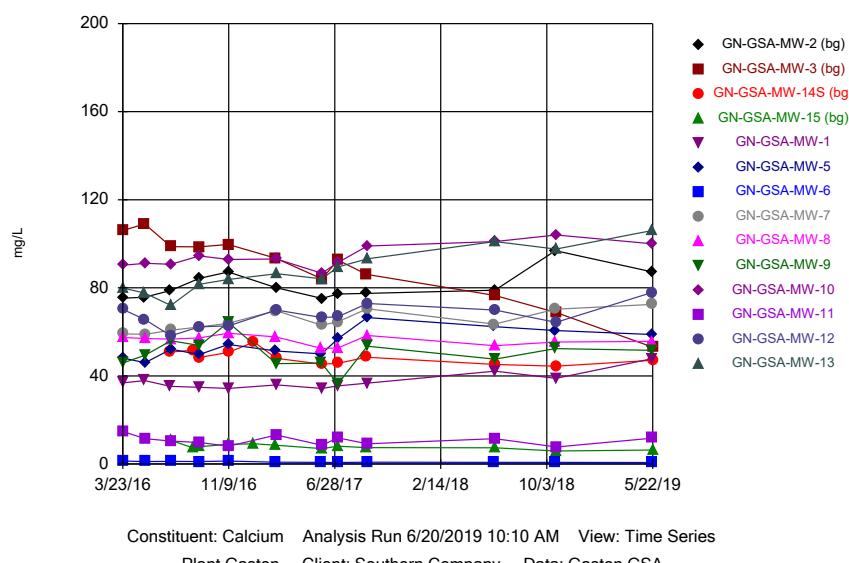
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



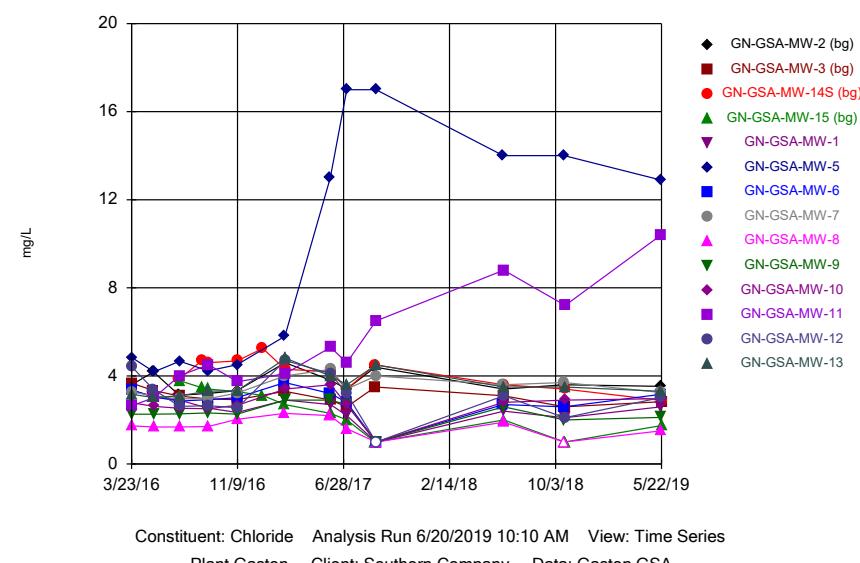
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG

### Time Series



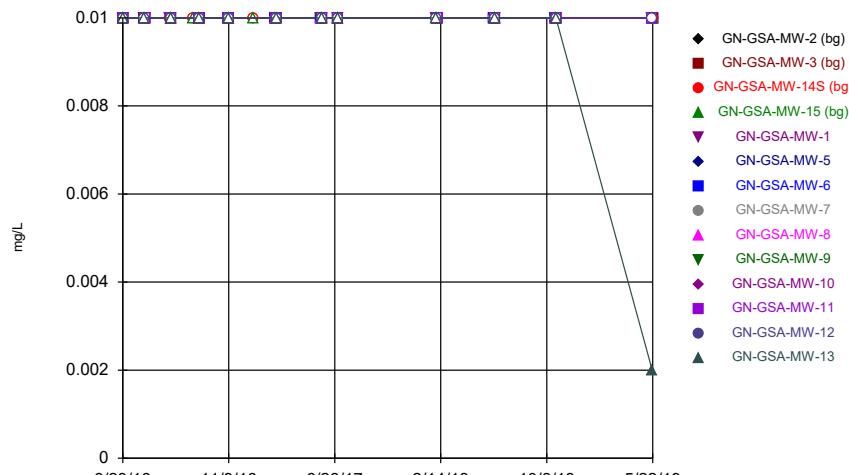
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



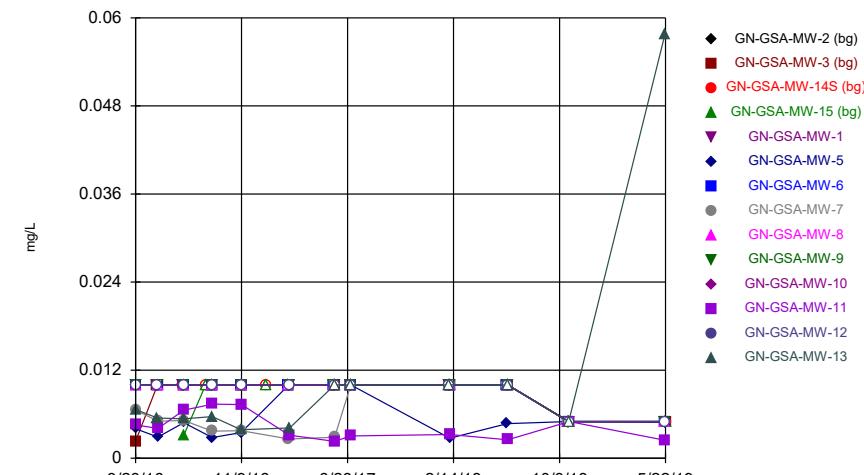
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



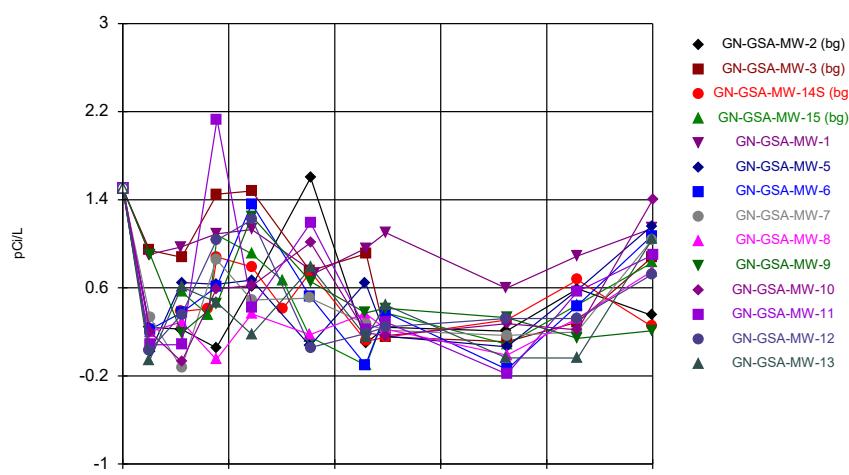
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



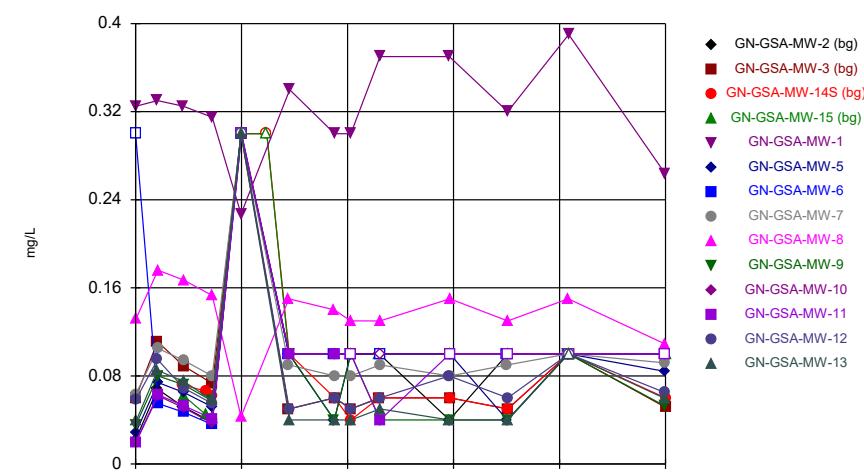
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



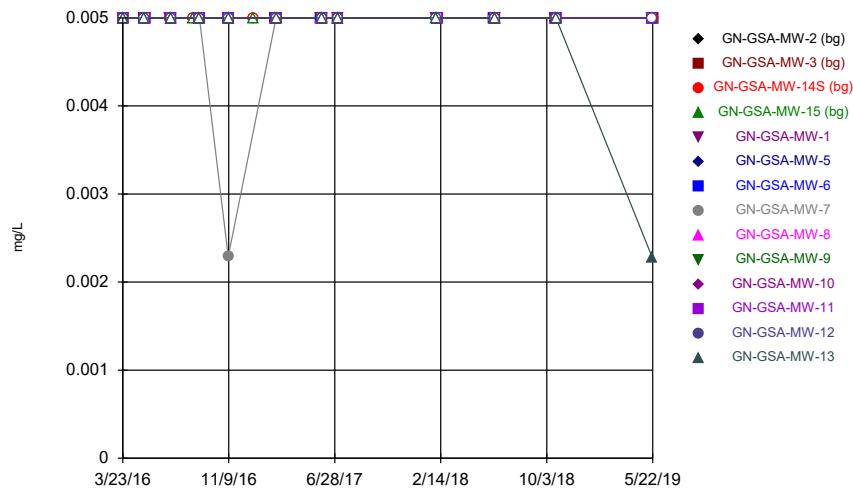
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



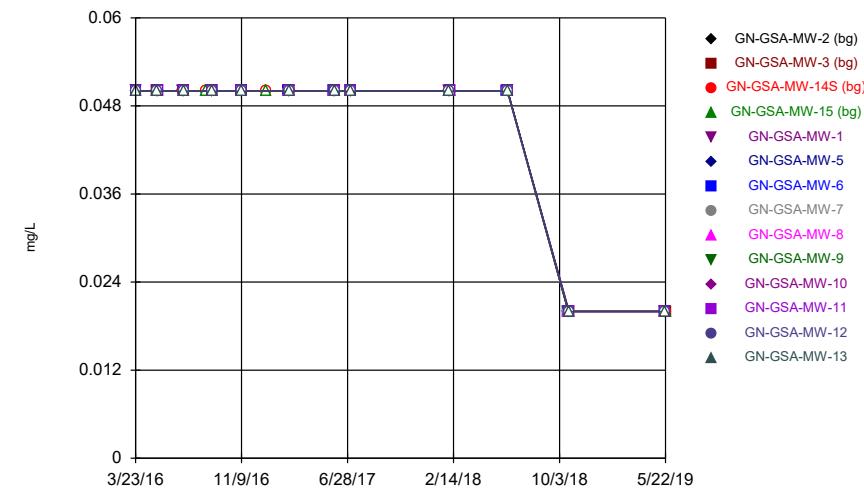
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



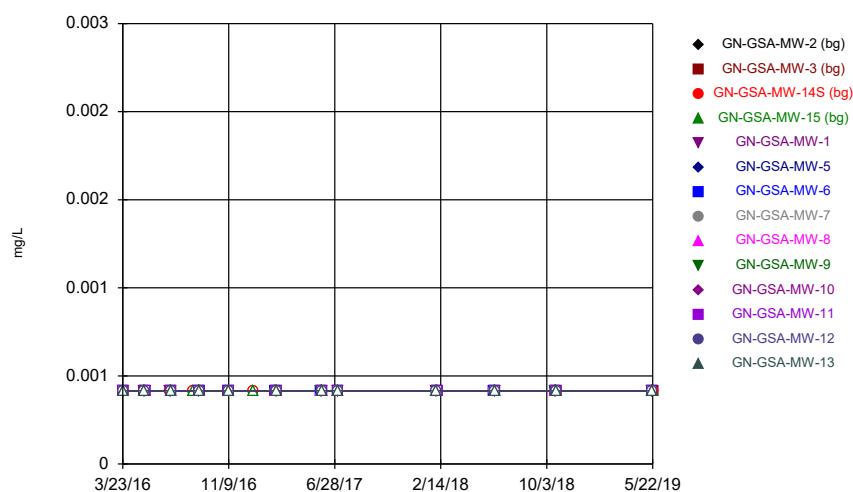
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



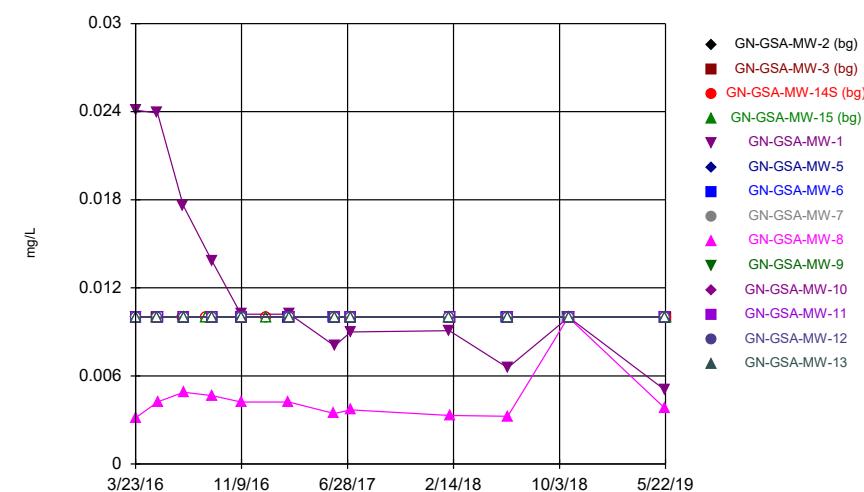
Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series

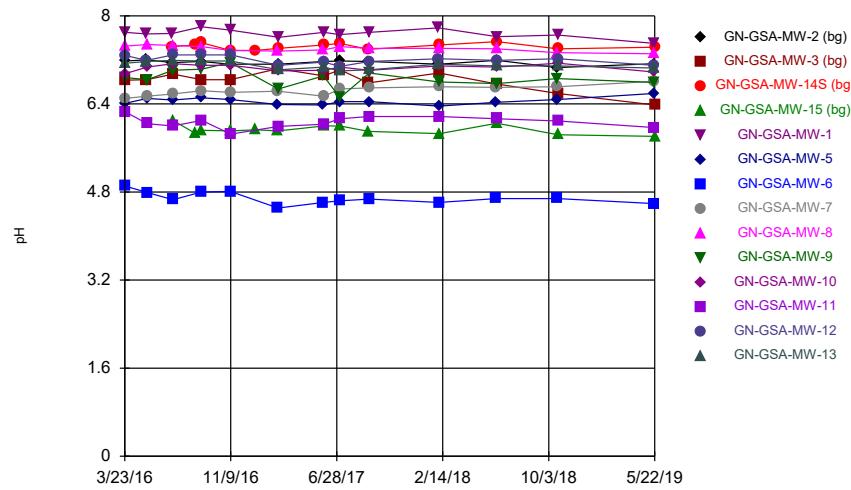


Sanitas™ v.9.6.14 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series

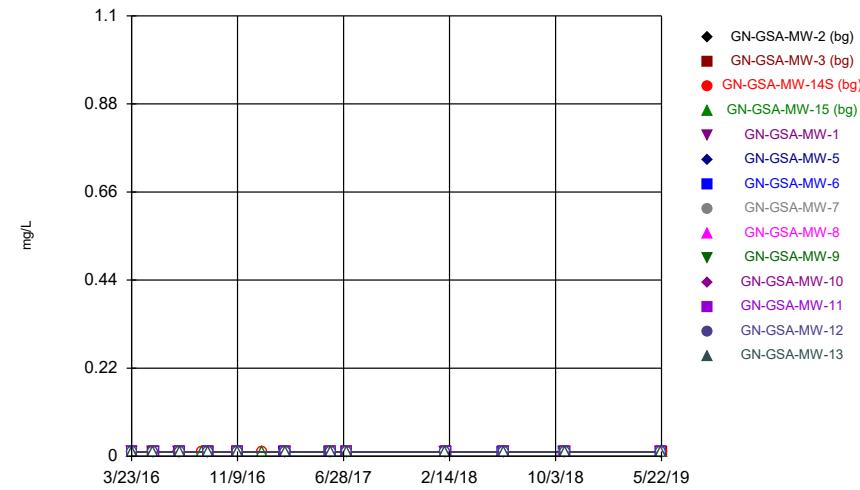


## Time Series



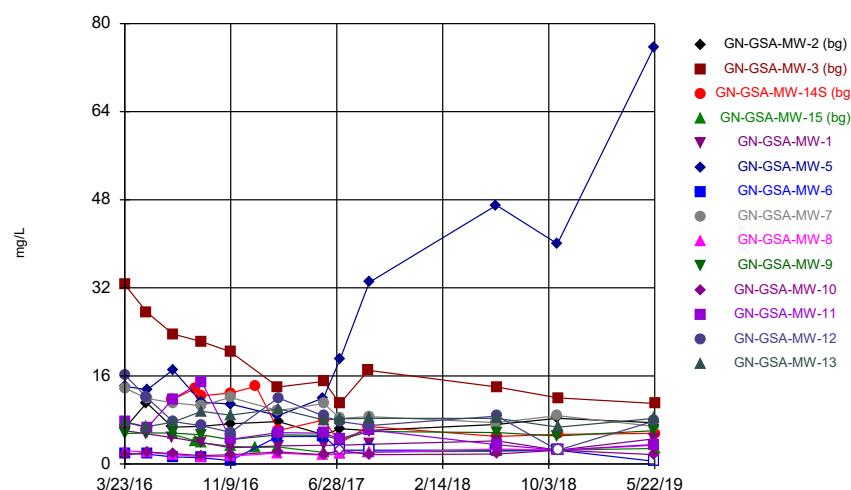
Constituent: pH Analysis Run 6/20/2019 10:10 AM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Time Series



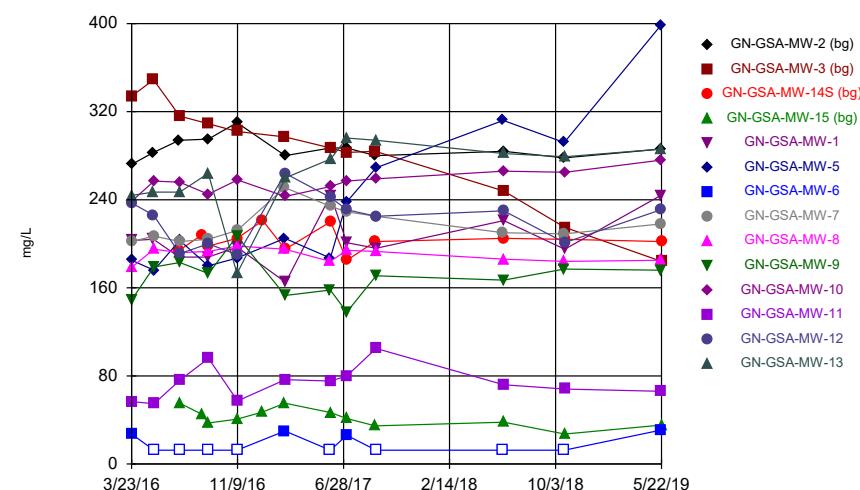
Constituent: Selenium Analysis Run 6/20/2019 10:10 AM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Time Series

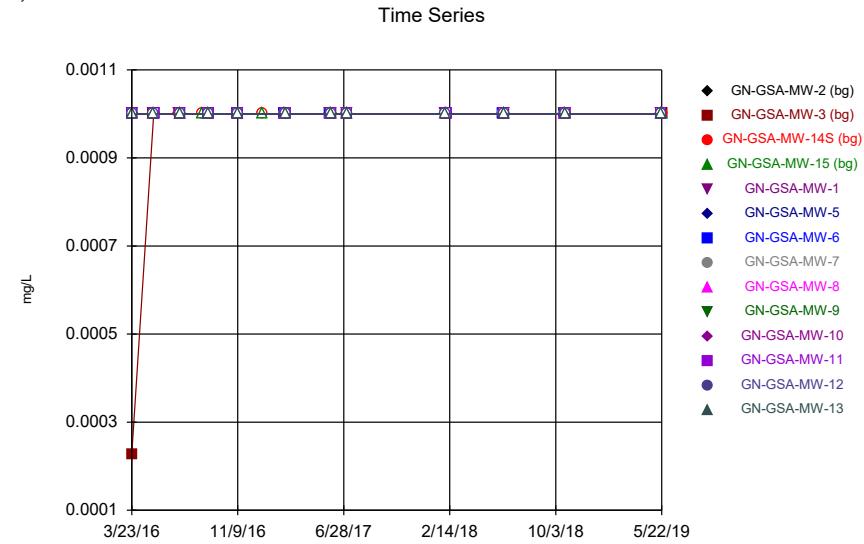


Constituent: Sulfate Analysis Run 6/20/2019 10:10 AM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Time Series



Constituent: TDS Analysis Run 6/20/2019 10:10 AM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

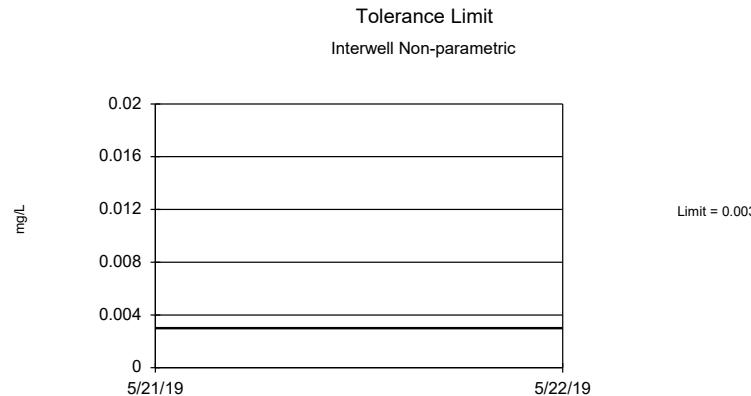


Constituent: Thallium Analysis Run 6/20/2019 10:10 AM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

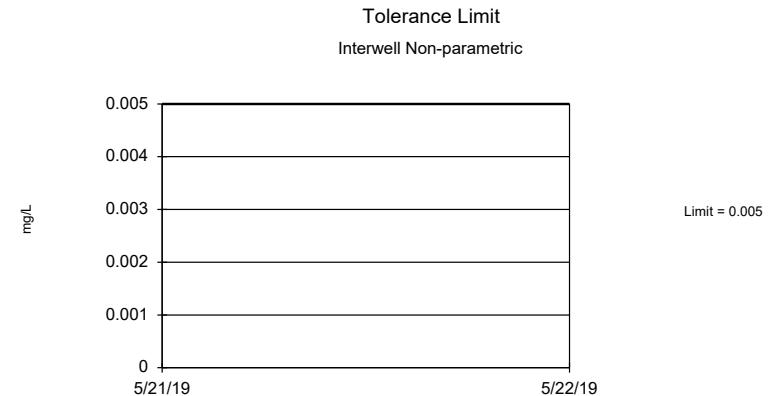
# Upper Tolerance Limits

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 6/20/2019, 10:12 AM

<u>Constituent</u>	<u>Upper Lim.</u>	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	48	n/a	n/a	93.75	n/a	n/a	0.08526	NP Inter(NDs)
Arsenic (mg/L)	0.005	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Barium (mg/L)	0.0622	48	n/a	n/a	2.083	n/a	n/a	0.08526	NP Inter(normal...)
Beryllium (mg/L)	0.003	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Cadmium (mg/L)	0.001	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Chromium (mg/L)	0.01	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Cobalt (mg/L)	0.01	48	n/a	n/a	95.83	n/a	n/a	0.08526	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.6	44	n/a	n/a	4.545	n/a	n/a	0.1047	NP Inter(normal...)
Fluoride (mg/L)	0.3	52	n/a	n/a	36.54	n/a	n/a	0.06944	NP Inter(normal...)
Lead (mg/L)	0.005	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Lithium (mg/L)	0.02	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Mercury (mg/L)	0.0005	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Molybdenum (mg/L)	0.01	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Selenium (mg/L)	0.01	48	n/a	n/a	100	n/a	n/a	0.08526	NP Inter(NDs)
Thallium (mg/L)	0.001	48	n/a	n/a	97.92	n/a	n/a	0.08526	NP Inter(NDs)



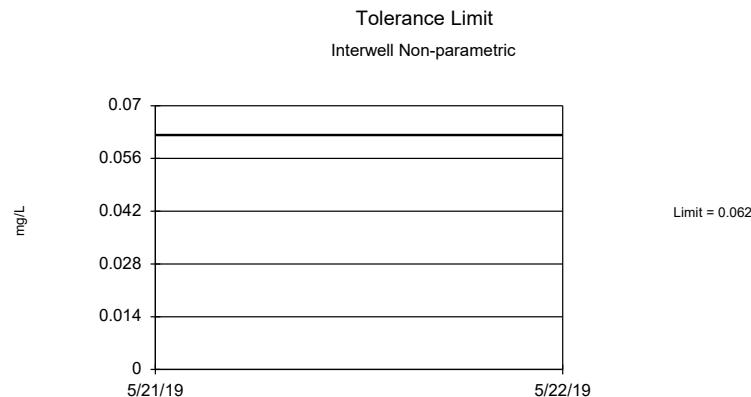
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 48 background values. 93.75% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.



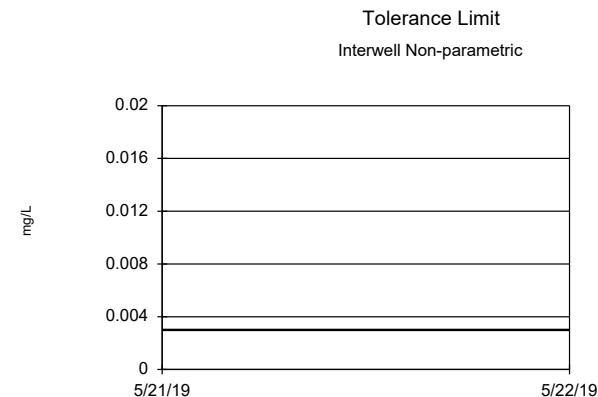
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Antimony Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Arsenic Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA



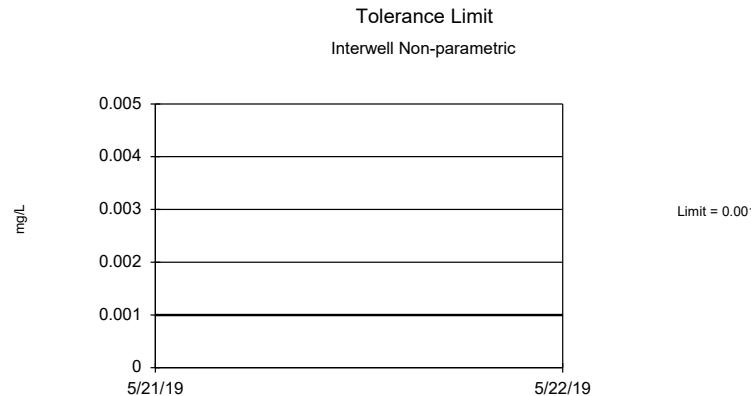
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. 2.083% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

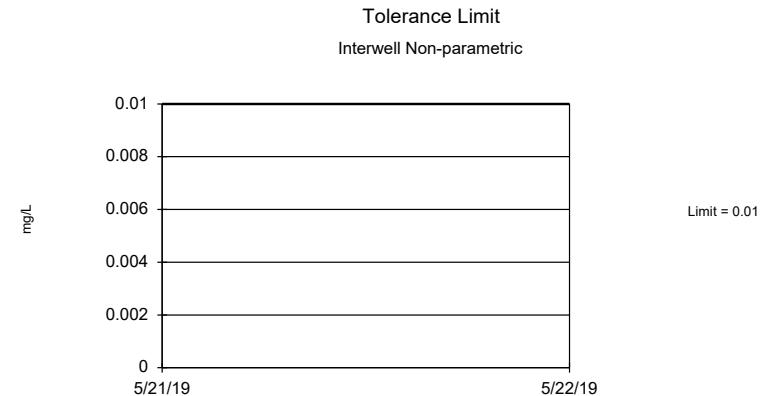
Constituent: Barium Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Beryllium Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA



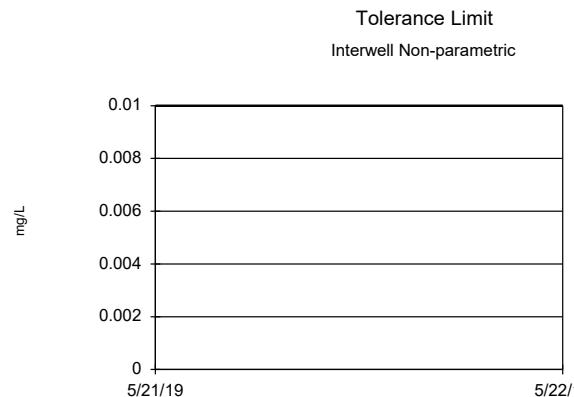
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Cadmium Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA



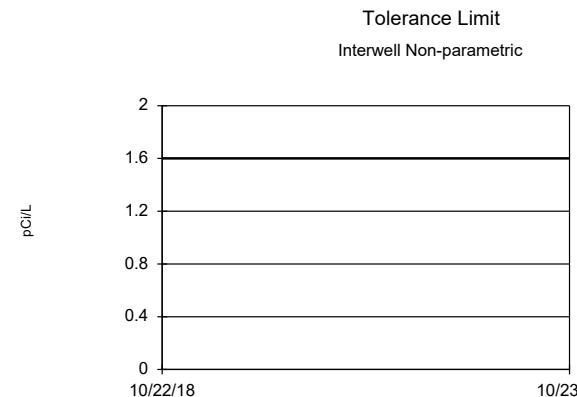
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Chromium Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA



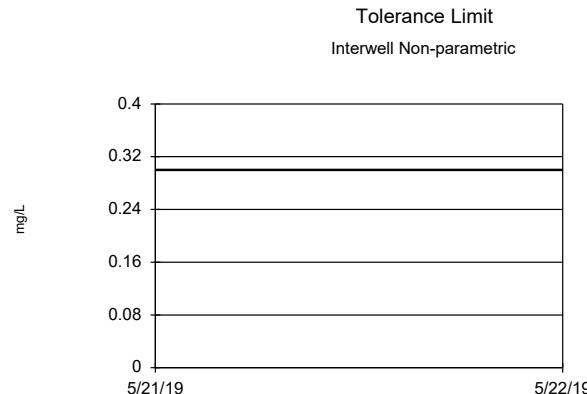
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 48 background values. 95.83% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Cobalt Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA

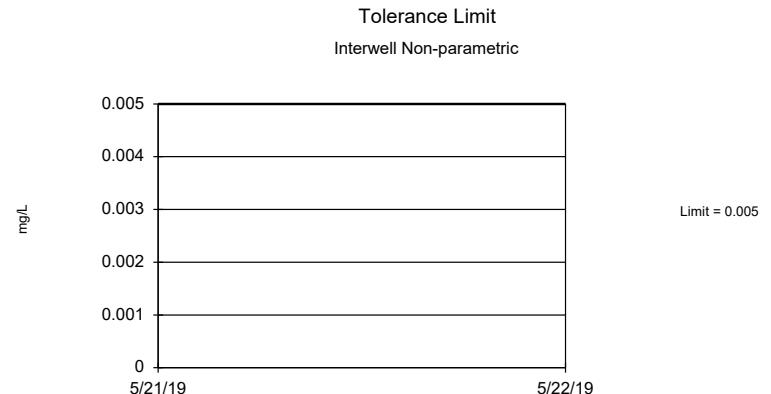


Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 4.54% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Combined Radium 226 + 228 Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA



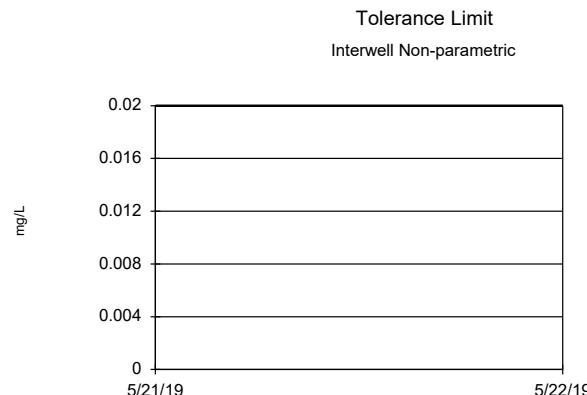
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 52 background values. 36.54% NDs. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.



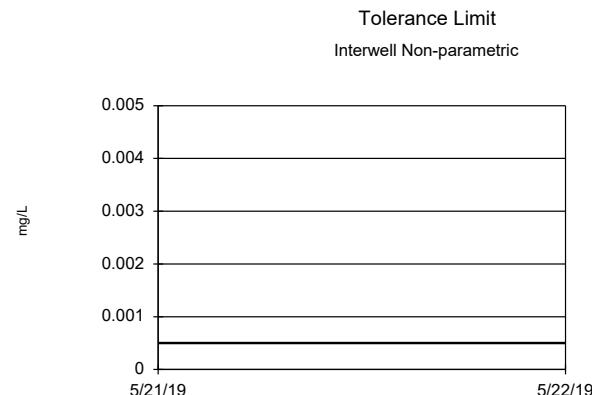
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Fluoride Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Lead Analysis Run 6/20/2019 10:11 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA



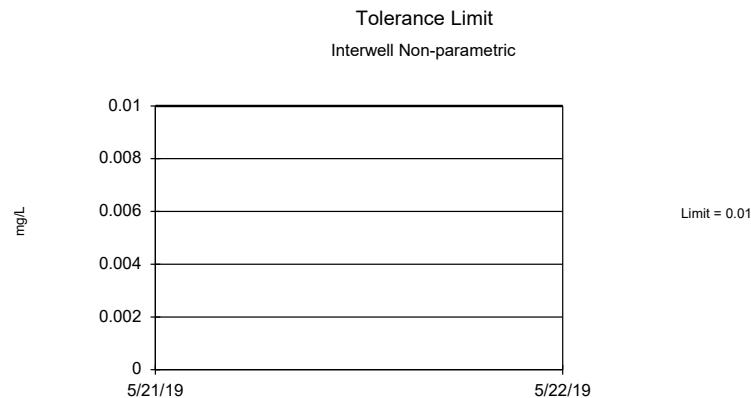
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.



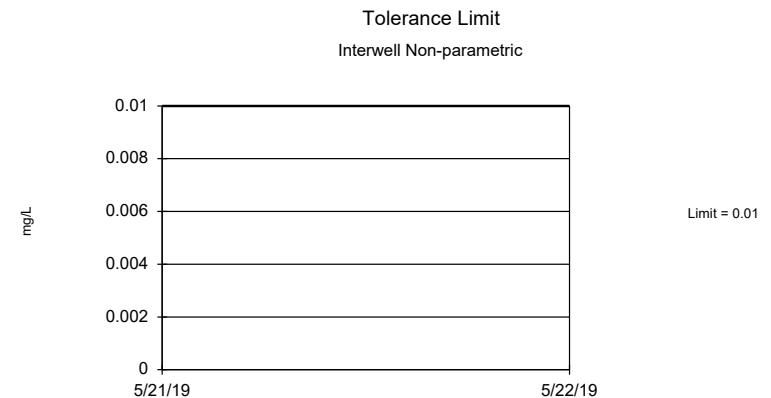
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Lithium Analysis Run 6/20/2019 10:12 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Mercury Analysis Run 6/20/2019 10:12 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA



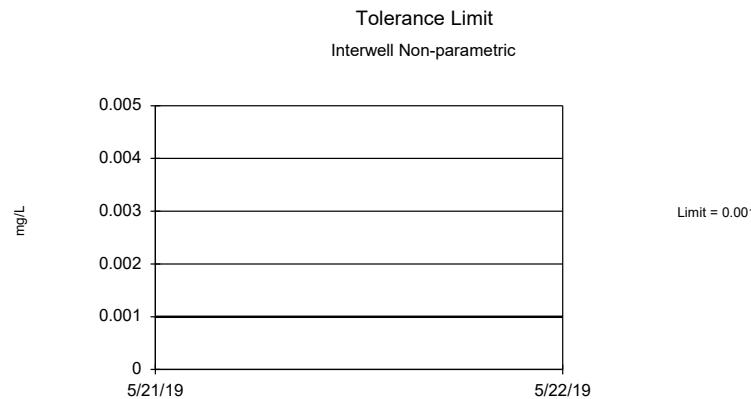
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Molybdenum Analysis Run 6/20/2019 10:12 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Selenium Analysis Run 6/20/2019 10:12 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 48 background values. 97.92% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Thallium Analysis Run 6/20/2019 10:12 AM View: Tolerance Limits  
Plant Gaston Client: Southern Company Data: Gaston GSA

# Confidence Intervals - All Results (No Significant Results)

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 6/20/2019, 10:15 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.003	0.000718	0.006	No	12	58.33	No	0.01	NP (normality)
Antimony (mg/L)	GN-GSA-MW-5	0.003	0.00241	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.003	0.00157	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.003	0.00123	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.003	0.00106	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.003	0.00112	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.003	0.000896	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-11	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.003	0.000813	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.003	0.00127	0.006	No	12	91.67	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.02285	0.009058	0.01	No	9	0	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-5	0.005	0.00259	0.01	No	12	83.33	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-6	0.005	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.005	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-8	0.005	0.00115	0.01	No	12	16.67	No	0.01	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-9	0.005	0.00121	0.01	No	12	83.33	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-10	0.005	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.005	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-12	0.005	0.00107	0.01	No	12	33.33	No	0.01	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-13	0.005	0.00152	0.01	No	12	50	No	0.01	NP (normality)
Barium (mg/L)	GN-GSA-MW-1	2.093	1.561	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-5	0.0671	0.0337	2	No	12	0	No	0.01	NP (normality)
Barium (mg/L)	GN-GSA-MW-6	0.01662	0.01425	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-7	0.02156	0.01852	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-8	0.03114	0.02589	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-9	0.02956	0.02313	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-10	0.03661	0.03279	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.008579	0.005894	2	No	12	8.333	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-12	0.02314	0.01937	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.0571	0.0454	2	No	12	0	sqrt(x)	0.01	Param.
Beryllium (mg/L)	GN-GSA-MW-1	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-5	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-6	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-7	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-8	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-9	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-10	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-11	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-12	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-13	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-1	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-5	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-6	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-7	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-8	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-9	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-10	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-11	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-12	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-13	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-5	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-9	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-12	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.01	0.002	0.1	No	12	91.67	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-1	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.01	0.00281	0.01	No	12	33.33	No	0.01	NP (Cohens/xfrm)
Cobalt (mg/L)	GN-GSA-MW-6	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-7	0.01	0.00287	0.01	No	12	41.67	No	0.01	NP (Cohens/xfrm)
Cobalt (mg/L)	GN-GSA-MW-8	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-9	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-10	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.005768	0.002819	0.01	No	12	8.333	No	0.01	Param.

# Confidence Intervals - All Results (No Significant Results)

Page 2

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 6/20/2019, 10:15 AM

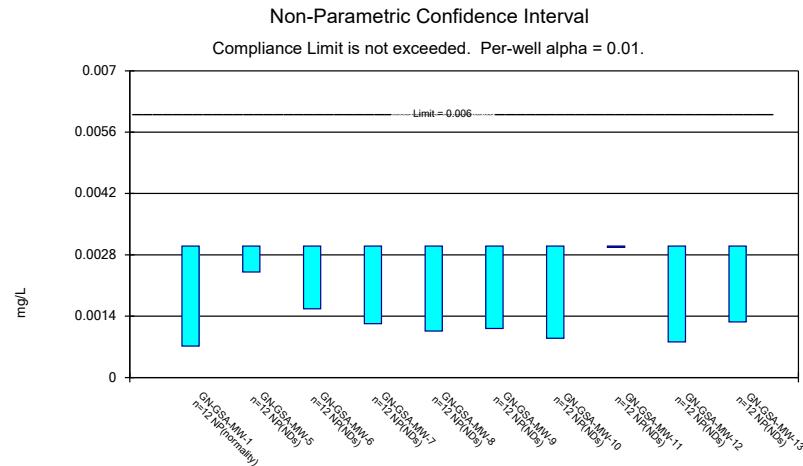
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	GN-GSA-MW-12	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-13	0.0578	0.00412	0.01	No	12	41.67	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.199	0.8042	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	0.9511	0.1666	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	1.016	0.1168	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.8824	0.1065	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.748	-0.0526	5	No	11	9.091	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	0.9601	0.2081	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	0.9964	0.112	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.242	0.06572	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	0.9607	0.1291	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	0.8734	0.04335	5	No	11	9.091	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-1	0.3538	0.2886	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-5	0.1	0.04	4	No	13	38.46	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-6	0.3	0.047	4	No	13	61.54	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-7	0.105	0.08	4	No	13	7.692	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-8	0.1573	0.1179	4	No	13	0	x^2	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.1	0.04	4	No	13	23.08	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-10	0.3	0.037	4	No	13	46.15	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-11	0.3	0.04	4	No	13	46.15	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-12	0.1	0.055	4	No	13	15.38	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.1	0.039	4	No	13	7.692	No	0.01	NP (normality)
Lead (mg/L)	GN-GSA-MW-1	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-5	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-7	0.005	0.00229	0.015	No	12	91.67	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-8	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-9	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-10	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-11	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-12	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.005	0.00228	0.015	No	12	91.67	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-5	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-6	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-7	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-8	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-9	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-10	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-11	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-12	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-13	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-14	0.05	0.02	0.04	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-1	0.01665	0.007501	0.1	No	12	8.333	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-5	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-6	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-7	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-8	0.00489	0.00325	0.1	No	12	8.333	No	0.01	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-9	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-10	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-11	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-12	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-13	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-1	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-5	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-6	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-7	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-8	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-9	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)

# Confidence Intervals - All Results (No Significant Results)

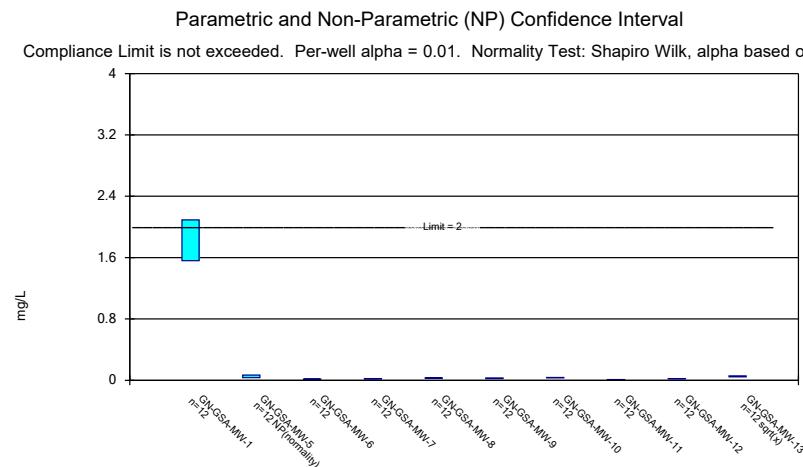
Page 3

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 6/20/2019, 10:15 AM

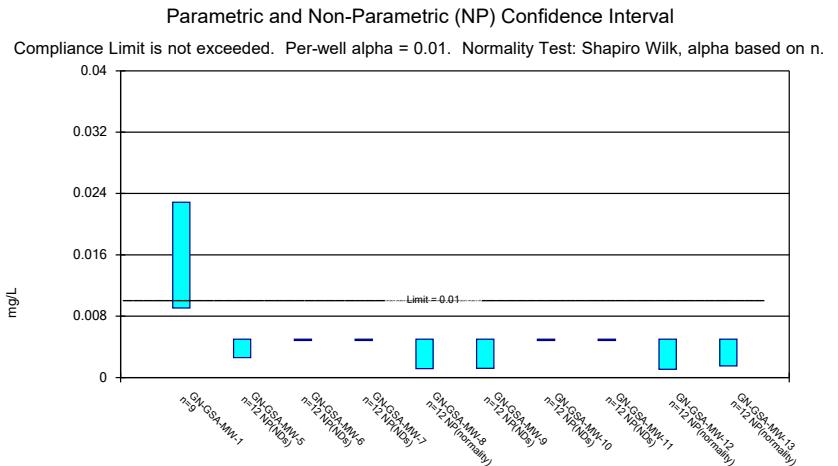
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Selenium (mg/L)	GN-GSA-MW-10	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-11	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-12	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-13	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-1	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-5	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-6	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-7	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-8	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-9	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-10	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-11	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-12	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-13	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)



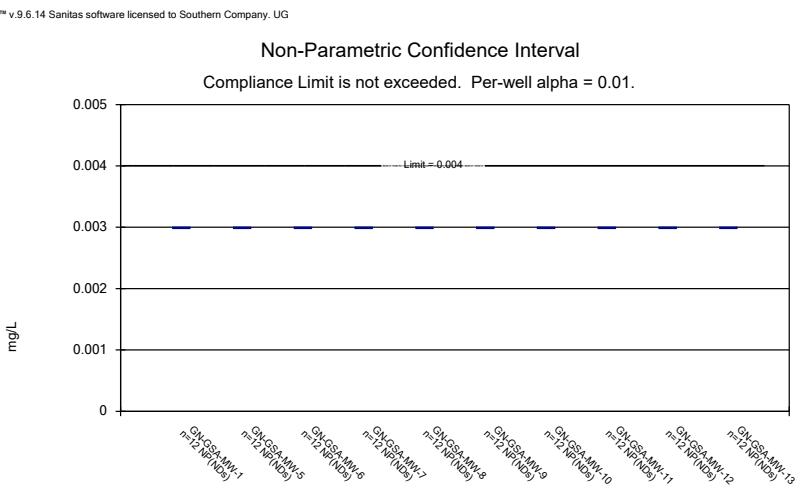
Constituent: Antimony Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA



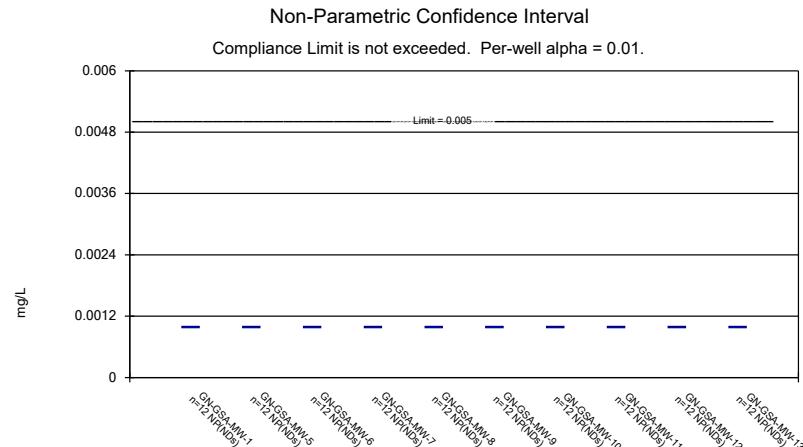
Constituent: Barium Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA



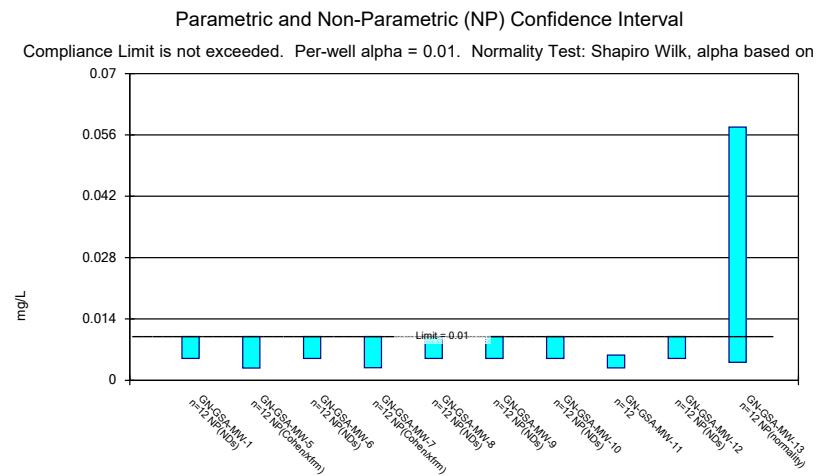
Constituent: Arsenic Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA



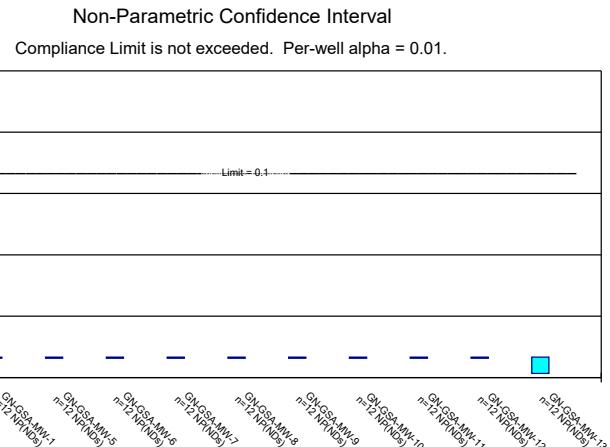
Constituent: Beryllium Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA



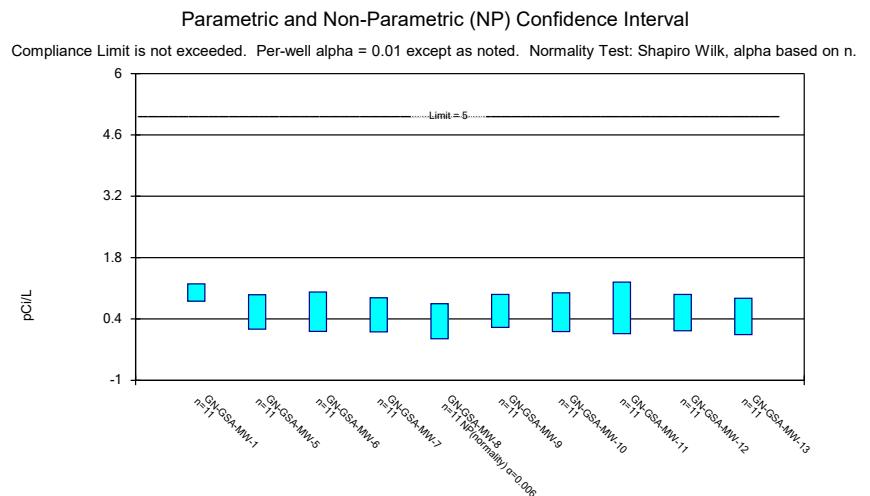
Constituent: Cadmium Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA



Constituent: Cobalt Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA



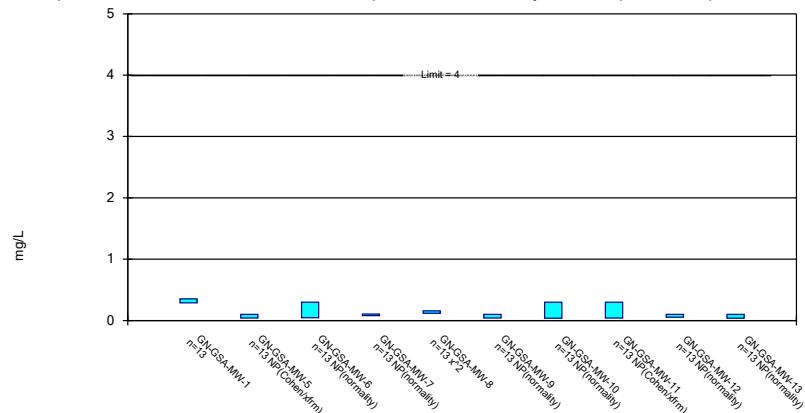
Constituent: Chromium Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA



Constituent: Combined Radium 226 + 228 Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA

**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.

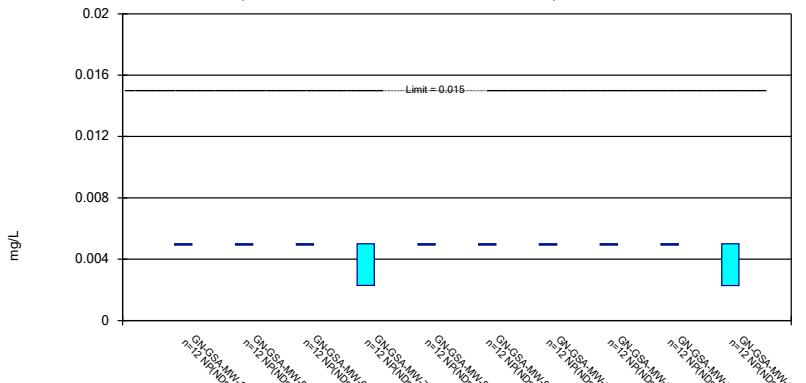


Constituent: Fluoride Analysis Run 6/20/2019 10:13 AM View: Confidence Intervals

Plant Gaston Client: Southern Company Data: Gaston GSA

**Non-Parametric Confidence Interval**

Compliance Limit is not exceeded. Per-well alpha = 0.01.

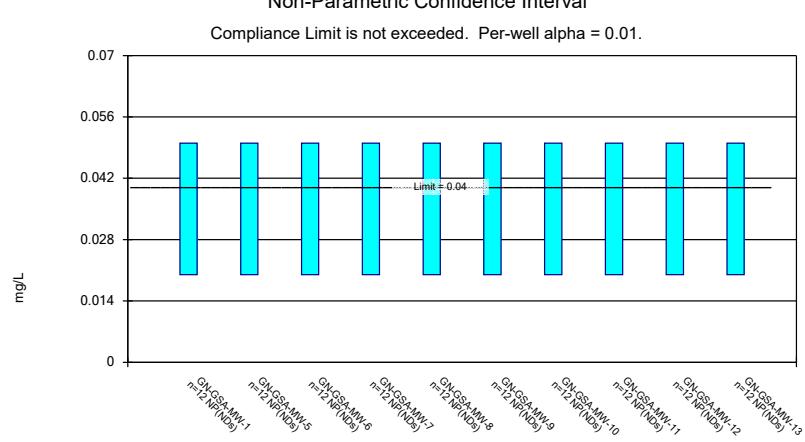


Constituent: Lead Analysis Run 6/20/2019 10:14 AM View: Confidence Intervals

Plant Gaston Client: Southern Company Data: Gaston GSA

**Non-Parametric Confidence Interval**

Compliance Limit is not exceeded. Per-well alpha = 0.01.

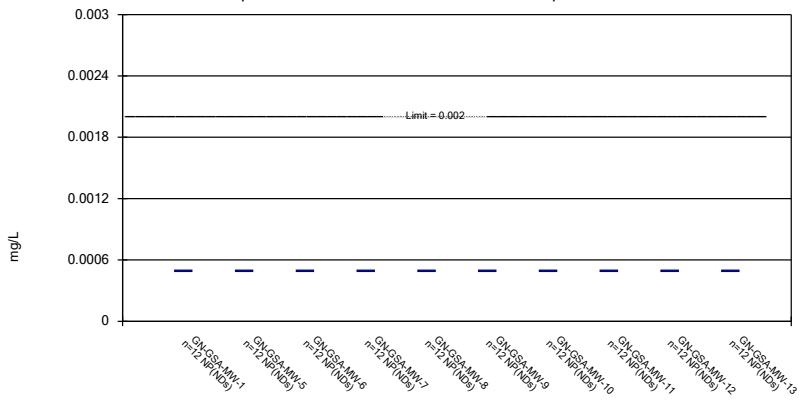


Constituent: Lithium Analysis Run 6/20/2019 10:14 AM View: Confidence Intervals

Plant Gaston Client: Southern Company Data: Gaston GSA

**Non-Parametric Confidence Interval**

Compliance Limit is not exceeded. Per-well alpha = 0.01.

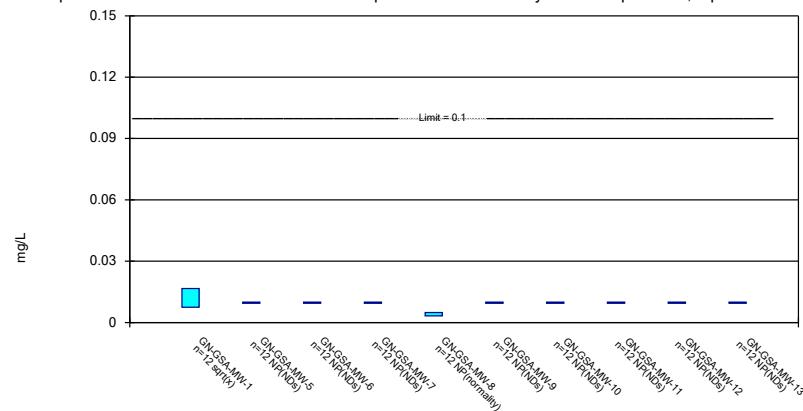


Constituent: Mercury Analysis Run 6/20/2019 10:14 AM View: Confidence Intervals

Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

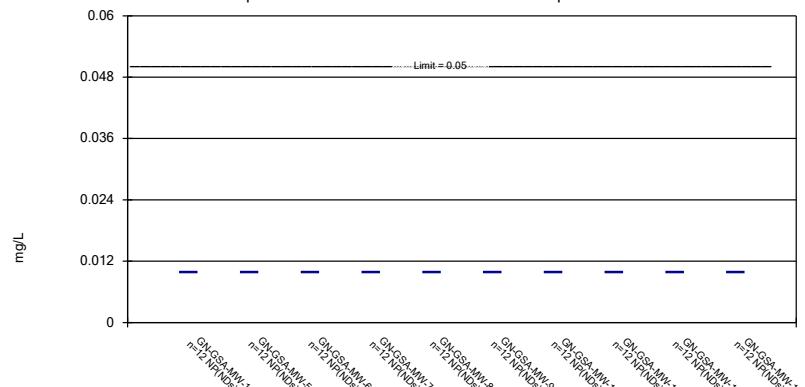
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 6/20/2019 10:14 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

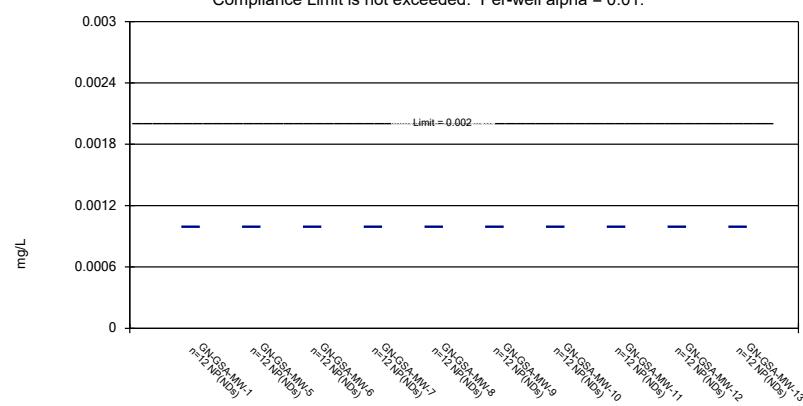
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 6/20/2019 10:14 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 6/20/2019 10:14 AM View: Confidence Intervals  
Plant Gaston Client: Southern Company Data: Gaston GSA

**2nd**

**Semi-Annual**

**Monitoring Event**

# Interwell Prediction Limit - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:01 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	GN-GSA-MW-1	0.111	n/a	9/4/2019	0.33	Yes	56	33.93	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-8	0.111	n/a	9/3/2019	0.123	Yes	56	33.93	n/a	0.000...	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-6	7.53	5.67	9/4/2019	4.59	Yes	56	0	n/a	0.001205	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-11	7.53	5.67	9/3/2019	5.12	Yes	56	0	n/a	0.001205	NP Inter (normality) ...

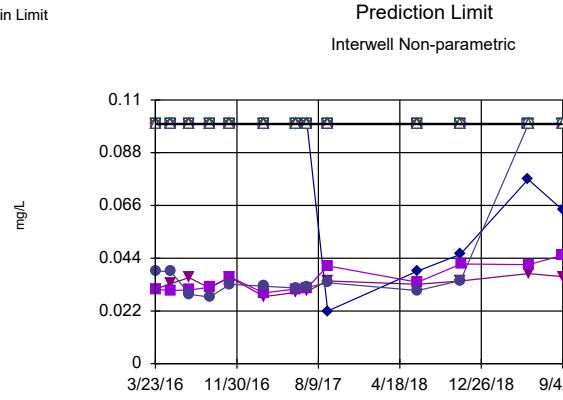
# Interwell Prediction Limit - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:01 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg_N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GN-GSA-MW-1	0.1	n/a	9/4/2019	0.0363	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-5	0.1	n/a	9/4/2019	0.0641	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-6	0.1	n/a	9/4/2019	0.1ND	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-7	0.1	n/a	9/4/2019	0.1ND	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-8	0.1	n/a	9/3/2019	0.1ND	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-9	0.1	n/a	9/3/2019	0.1ND	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-10	0.1	n/a	9/3/2019	0.1ND	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-11	0.1	n/a	9/3/2019	0.0452	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-12	0.1	n/a	9/4/2019	0.1ND	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-13	0.1	n/a	9/4/2019	0.1ND	No	52	98.08	n/a	0.000...	NP Inter (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>0.111</b>	<b>n/a</b>	<b>9/4/2019</b>	<b>0.33</b>	<b>Yes</b>	<b>56</b>	<b>33.93</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Fluoride (mg/L)	GN-GSA-MW-5	0.111	n/a	9/4/2019	0.0962	No	56	33.93	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-6	0.111	n/a	9/4/2019	0.1ND	No	56	33.93	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-7	0.111	n/a	9/4/2019	0.07	No	56	33.93	n/a	0.000...	NP Inter (normality) ...
<b>Fluoride (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>0.111</b>	<b>n/a</b>	<b>9/3/2019</b>	<b>0.123</b>	<b>Yes</b>	<b>56</b>	<b>33.93</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Fluoride (mg/L)	GN-GSA-MW-9	0.111	n/a	9/3/2019	0.0554	No	56	33.93	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-10	0.111	n/a	9/3/2019	0.1ND	No	56	33.93	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-11	0.111	n/a	9/3/2019	0.1ND	No	56	33.93	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-12	0.111	n/a	9/4/2019	0.0547	No	56	33.93	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	GN-GSA-MW-13	0.111	n/a	9/4/2019	0.0555	No	56	33.93	n/a	0.000...	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-1	7.53	5.67	9/4/2019	7.4	No	56	0	n/a	0.001205	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-5	7.53	5.67	9/4/2019	6.81	No	56	0	n/a	0.001205	NP Inter (normality) ...
<b>pH (pH)</b>	<b>GN-GSA-MW-6</b>	<b>7.53</b>	<b>5.67</b>	<b>9/4/2019</b>	<b>4.59</b>	<b>Yes</b>	<b>56</b>	<b>0</b>	<b>n/a</b>	<b>0.001205</b>	<b>NP Inter (normality) ...</b>
pH (pH)	GN-GSA-MW-7	7.53	5.67	9/4/2019	6.78	No	56	0	n/a	0.001205	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-8	7.53	5.67	9/3/2019	7.46	No	56	0	n/a	0.001205	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-9	7.53	5.67	9/3/2019	6.53	No	56	0	n/a	0.001205	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-10	7.53	5.67	9/3/2019	6.67	No	56	0	n/a	0.001205	NP Inter (normality) ...
<b>pH (pH)</b>	<b>GN-GSA-MW-11</b>	<b>7.53</b>	<b>5.67</b>	<b>9/3/2019</b>	<b>5.12</b>	<b>Yes</b>	<b>56</b>	<b>0</b>	<b>n/a</b>	<b>0.001205</b>	<b>NP Inter (normality) ...</b>
pH (pH)	GN-GSA-MW-12	7.53	5.67	9/4/2019	7.24	No	56	0	n/a	0.001205	NP Inter (normality) ...
pH (pH)	GN-GSA-MW-13	7.53	5.67	9/4/2019	6.71	No	56	0	n/a	0.001205	NP Inter (normality) ...

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

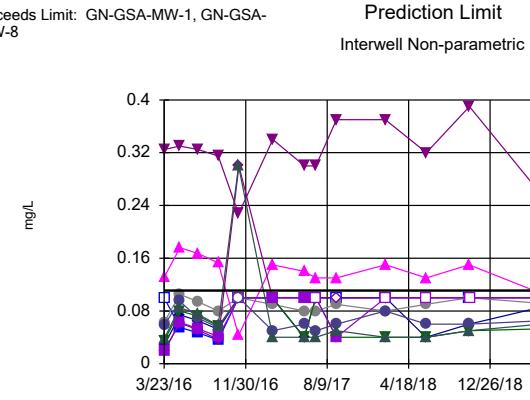
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 52 background values. 98.08% NDs. Annual per-constituent alpha = 0.01367. Individual comparison alpha = 0.0006878 (1 of 2). Comparing 10 points to limit.

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Hollow symbols indicate censored values.

Exceeds Limit: GN-GSA-MW-1, GN-GSA-MW-8



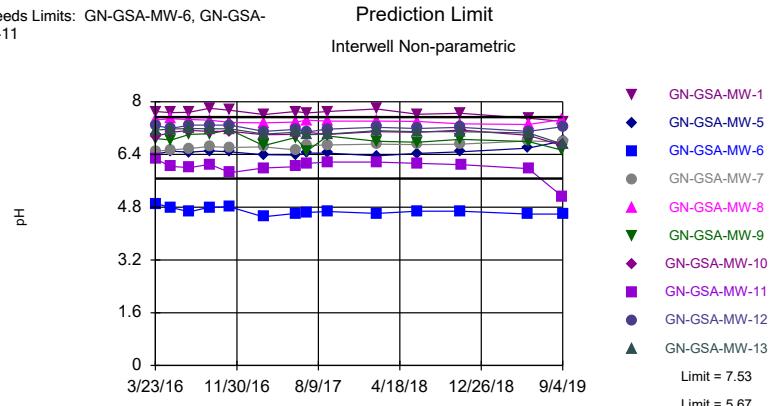
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 56 background values. 33.93% NDs. Annual per-constituent alpha = 0.01198. Individual comparison alpha = 0.0006023 (1 of 2). Comparing 10 points to limit.

Constituent: Boron Analysis Run 1/17/2020 1:00 PM View: Interwell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Fluoride Analysis Run 1/17/2020 1:00 PM View: Interwell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Exceeds Limits: GN-GSA-MW-6, GN-GSA-MW-11



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. Limits are highest and lowest of 56 background values. Annual per-constituent alpha = 0.02396. Individual comparison alpha = 0.001205 (1 of 2). Comparing 10 points to limit.

Constituent: pH Analysis Run 1/17/2020 1:00 PM View: Interwell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/17/2020 1:01 PM View: Interwell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-3 (bg)	GN-GSA-MW-11	GN-GSA-MW-9	GN-GSA-MW-12	GN-GSA-MW-1
3/23/2016	<0.1	<0.1	<0.1	<0.1	<0.1	0.0309 (J)	<0.1	0.0387 (J)	
3/24/2016					<0.1				0.0311 (J)
5/10/2016	<0.1		<0.1	<0.1		0.0306 (J)	<0.1	0.0384 (J)	0.0334 (J)
5/11/2016		<0.1		<0.1					
7/5/2016	<0.1			<0.1	<0.1	0.0307 (J)	<0.1		0.0359 (J)
7/6/2016		<0.1	<0.1	<0.1				0.029 (J)	
8/23/2016									
9/6/2016	<0.1	<0.1	<0.1	<0.1				0.0278 (J)	0.0316 (J)
9/7/2016					<0.1	0.0319 (J)	<0.1		
11/8/2016	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1		0.0361 (J)
11/9/2016						0.0362 (J)		0.0331 (J)	
1/3/2017									
2/20/2017		<0.1	<0.1	<0.1	<0.1				
2/21/2017	<0.1					0.0295 (J)	<0.1	0.0323 (J)	
2/22/2017									0.028 (J)
5/30/2017		<0.1	<0.1				<0.1		
5/31/2017	<0.1			<0.1	<0.1	0.0312 (J)		0.0316 (J)	0.0297 (J)
7/5/2017	<0.1	<0.1	<0.1	<0.1	<0.1	0.0315 (J)	<0.1	0.0318 (J)	0.0302 (J)
9/5/2017	<0.1				<0.1				
9/7/2017		0.022 (J)	<0.1	<0.1		0.0408 (J)	<0.1	0.0338 (J)	0.0345 (J)
6/11/2018		0.0386 (J)	<0.1	<0.1					
6/12/2018	<0.1				<0.1	0.034 (J)	<0.1	0.0305 (J)	0.0331 (J)
10/22/2018	<0.1	0.0456 (J)	<0.1	<0.1					
10/23/2018					<0.1			0.0347 (J)	0.0345 (J)
10/24/2018						0.0416 (J)			
5/20/2019	<0.1	0.0769 (J)	<0.1	<0.1					
5/21/2019						0.0413 (J)	<0.1	<0.1	0.0376 (J)
5/22/2019					<0.1				
9/3/2019						0.0452 (J)	<0.1		
9/4/2019	<0.1	0.0641 (J)	<0.1	<0.1	<0.1			<0.1	0.0363 (J)

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/17/2020 1:01 PM View: Interwell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-13	GN-GSA-MW-10	GN-GSA-MW-14S..GN-GSA-MW-15 ...
3/23/2016				
3/24/2016	<0.1	<0.1	<0.1	
5/10/2016		<0.1		
5/11/2016	<0.1		<0.1	
7/5/2016				<0.1
7/6/2016	<0.1	<0.1	<0.1	
8/23/2016				<0.1
9/6/2016	<0.1	<0.1	<0.1	
9/7/2016				<0.1
11/8/2016	<0.1	<0.1		<0.1
11/9/2016			<0.1	
1/3/2017				0.0211 (J)
2/20/2017	<0.1			
2/21/2017		<0.1	<0.1	
2/22/2017		<0.1		
5/30/2017	<0.1			
5/31/2017		<0.1	<0.1	<0.1
7/5/2017	<0.1	<0.1	<0.1	<0.1
9/5/2017				<0.1
9/7/2017	<0.1	<0.1	<0.1	
6/11/2018				
6/12/2018	<0.1	<0.1	<0.1	<0.1
10/22/2018	<0.1			
10/23/2018		<0.1		<0.1
10/24/2018			<0.1	
5/20/2019				
5/21/2019	<0.1	<0.1	<0.1	
5/22/2019				<0.1
9/3/2019	<0.1		<0.1	
9/4/2019		<0.1		<0.1

## Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/17/2020 1:01 PM View: Interwell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-9	GN-GSA-MW-3 (bg)	GN-GSA-MW-12	GN-GSA-MW-11	GN-GSA-MW-8
3/23/2016	0.022 (J)	0.028 (J)	<0.1	0.063 (J)	0.035 (J)	0.06 (J)	0.058 (J)	0.02 (J)	
3/24/2016									0.132 (J)
5/10/2016	0.068 (J)		0.074 (J)	0.055 (J)	0.105 (J)	0.08 (J)		0.095 (J)	
7/5/2016	0.052 (J)			0.065 (J)	0.047 (J)	0.094 (J)	0.072 (J)	0.089 (J)	0.063 (J)
7/6/2016								0.069 (J)	0.176 (J)
8/23/2016								0.053 (J)	0.167 (J)
9/6/2016	0.038 (J)	0.052 (J)	0.036 (J)	0.08 (J)				0.055 (J)	0.153 (J)
9/7/2016						0.057 (J)	0.073 (J)		0.041 (J)
11/8/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		0.043 (J)
11/9/2016								<0.1	<0.1
1/3/2017									
2/20/2017		0.1	0.1	0.09 (J)			0.05 (J)		0.15
2/21/2017	0.1				0.1		0.05 (J)	0.1	
2/22/2017									
5/30/2017		0.04 (J)	0.1		0.04 (J)				0.14
5/31/2017	0.1			0.08 (J)		0.06 (J)	0.06 (J)	0.1	
7/5/2017	<0.1	<0.1	<0.1	0.08 (J)	<0.1	0.05 (J)	0.05 (J)	<0.1	0.13
9/5/2017	<0.1					0.06 (J)			
9/7/2017		<0.1	<0.1	0.09 (J)	0.04 (J)		0.06 (J)	0.04 (J)	0.13
2/5/2018	0.04 (J)						0.08 (J)		
2/6/2018		<0.1	<0.1	0.08 (J)	0.04 (J)	0.06 (J)		<0.1	0.15
2/7/2018									
6/11/2018		0.04 (J)	<0.1	0.09 (J)					
6/12/2018	<0.1				0.04 (J)	0.05 (J)	0.06 (J)	<0.1	0.13
10/22/2018	<0.1	0.06 (J)	<0.1	0.1	0.05 (J)				0.15
10/23/2018						0.05 (J)	0.06 (J)		
10/24/2018								<0.1	
5/20/2019	<0.1	0.0842 (J)	<0.1	0.0919 (J)					
5/21/2019					0.0526 (J)		0.0649 (J)	<0.1	0.109
5/22/2019						0.0515 (J)			
9/3/2019					0.0554 (J)			<0.1	0.123
9/4/2019	<0.1	0.0962 (J)	<0.1	0.07 (J)		0.0594 (J)	0.0547 (J)		

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/17/2020 1:01 PM View: Interwell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-1	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...
3/23/2016				
3/24/2016	0.02 (J)	0.325	0.039 (J)	
5/10/2016		0.33	0.085 (J)	
5/11/2016	0.062 (J)			
7/5/2016		0.325		0.072 (J)
7/6/2016	0.051 (J)		0.075 (J)	0.062 (J)
8/23/2016				0.066 (J) 0.045 (J)
9/6/2016	0.037 (J)	0.315	0.058 (J)	
9/7/2016				0.062 (J) 0.042 (J)
11/8/2016		0.227 (J)	0.3 (U)	<0.1 <0.1
11/9/2016	0.3 (U)			
1/3/2017			<0.1	<0.1
2/20/2017				0.1
2/21/2017	0.1			0.1
2/22/2017		0.34	0.04 (J)	
5/30/2017				
5/31/2017	0.1	0.3	0.04 (J) 0.06 (J)	0.1
7/5/2017	<0.1	0.3	0.04 (J) 0.06 (J)	<0.1
9/5/2017				<0.1
9/7/2017	<0.1	0.37	0.05 (J)	
2/5/2018		0.37	0.04 (J)	
2/6/2018	<0.1			0.06 (J)
2/7/2018				<0.1
6/11/2018				
6/12/2018	<0.1	0.32	0.04 (J) 0.05 (J)	<0.1
10/22/2018				
10/23/2018		0.39	0.05 (J) 0.07 (J)	<0.1
10/24/2018	<0.1			
5/20/2019				
5/21/2019	<0.1	0.264	0.0595 (J)	
5/22/2019				0.0601 (J) <0.1
9/3/2019	<0.1			
9/4/2019		0.33	0.0555 (J) 0.0703 (J)	<0.1

## Prediction Limit

Constituent: pH (pH) Analysis Run 1/17/2020 1:01 PM View: Interwell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-9	GN-GSA-MW-3 (bg)	GN-GSA-MW-12	GN-GSA-MW-11	GN-GSA-MW-8
3/23/2016	7.18	6.41	4.91	6.5	6.88	6.83	7.28	6.26	
3/24/2016									7.45
5/10/2016	7.2					6.84	7.19		
5/11/2016		6.5	4.79	6.54	6.84			6.04	7.48
7/5/2016	7.15								
7/6/2016		6.47	4.66	6.58	7.01	6.94	7.29	6	7.46
8/23/2016									
9/6/2016	7.17	6.51	4.8	6.64			7.29		7.44
9/7/2016					7.03	6.84		6.1	
11/8/2016	7.12	6.48	4.81	6.61	7.15	6.84			7.37
11/9/2016							7.29	5.85	
1/3/2017									
2/20/2017		6.39	4.51	6.63		7.04			7.36
2/21/2017	7.12				6.67		7.1	5.99	
2/22/2017									
5/30/2017		6.38	4.61		6.91				7.38
5/31/2017	7.17			6.54		6.91	7.16	6.03	
7/5/2017	7.18	6.44	4.64	6.67	6.51	7.02	7.08	6.13	7.44
9/5/2017	7.17					6.78			
9/7/2017		6.44	4.67	6.69	6.96		7.17	6.17	7.41
2/5/2018	7.12						7.22		
2/6/2018		6.36	4.61	6.71	6.8	6.96		6.17	7.41
2/7/2018									
6/11/2018		6.43	4.68	6.7					
6/12/2018	7.19				6.77	6.76	7.19	6.13	7.4
10/22/2018	7.06	6.48	4.68	6.71	6.86				7.33
10/23/2018						6.59	7.22		
10/24/2018								6.09	
5/20/2019	7.13	6.59	4.59	6.81					
5/21/2019					6.79		7.1	5.97	7.31
5/22/2019						6.38			
9/3/2019					6.53			5.12	7.46
9/4/2019	7.16	6.81	4.59	6.78		6.71	7.24		

# Prediction Limit

Page 2

Constituent: pH (pH) Analysis Run 1/17/2020 1:01 PM View: Interwell PL  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-1	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016					
3/24/2016	6.95	7.7	7.14		
5/10/2016		7.67	7.17		
5/11/2016	7.07				
7/5/2016		7.68		7.44	
7/6/2016	7.13		7.19		6.1
8/23/2016				7.47	5.87
9/6/2016	7.1	7.8	7.18		
9/7/2016				7.51	5.92
11/8/2016		7.74	7.18	7.37	5.91
11/9/2016	7.1				
1/3/2017				7.37	5.93
2/20/2017					5.91
2/21/2017	7			7.41	
2/22/2017		7.61	7.02		
5/30/2017					
5/31/2017	7.01	7.7	7.07	7.47	6
7/5/2017	7.07	7.66	7	7.5	6
9/5/2017				7.39	5.9
9/7/2017	7.01	7.7	7.02		
2/5/2018		7.78	7.12		
2/6/2018	7.09			7.47	
2/7/2018					5.86
6/11/2018					
6/12/2018	7.07	7.62	7.09	7.53	6.05
10/22/2018					
10/23/2018		7.65	7.09	7.4	5.84
10/24/2018	7.14				
5/20/2019					
5/21/2019	6.98	7.5	7.05		
5/22/2019				7.43	5.81
9/3/2019	6.67				
9/4/2019		7.4	6.71	7.45	5.67

# Intrawell Prediction Limit - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:08 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	GN-GSA-MW-8	3.582	n/a	9/3/2019	4.15	Yes	12	0	No	0.000...	Param Intra 1 of 2

# Intrawell Prediction Limit - All Results

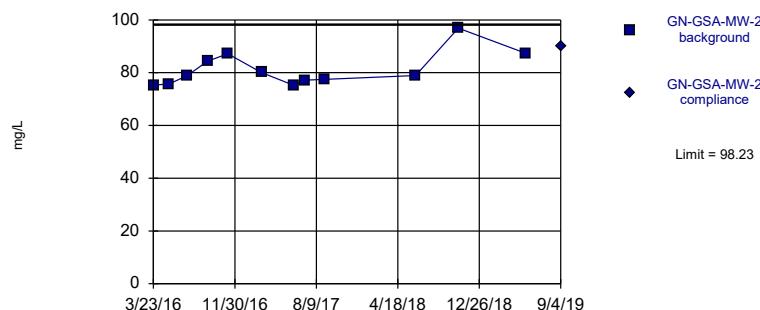
Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:08 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GN-GSA-MW-2	98.23	n/a	9/4/2019	89.8	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-3	131.1	n/a	9/4/2019	76.4	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-14S	56.86	n/a	9/4/2019	47.4	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-15	11.31	n/a	9/4/2019	6.07	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-1	48.17	n/a	9/4/2019	41.4	No	12	0	In(x)	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-5	71.16	n/a	9/4/2019	57.9	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-6	1.591	n/a	9/4/2019	0.872	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-7	77.07	n/a	9/4/2019	72	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-8	61.91	n/a	9/3/2019	57.4	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-9	68.06	n/a	9/3/2019	60.3	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-10	108.5	n/a	9/3/2019	102	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-11	16.25	n/a	9/3/2019	8.9	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-12	81.01	n/a	9/4/2019	74.2	No	12	0	No	0.000...	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-13	113.9	n/a	9/4/2019	93.7	No	12	0	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-2	4.914	n/a	9/4/2019	3.56	No	12	0	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-3	3.937	n/a	9/4/2019	2.92	No	12	0	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-14S	5.904	n/a	9/4/2019	2.88	No	12	0	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-15	4.846	n/a	9/4/2019	1.95	No	12	8.333	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-1	4.063	n/a	9/4/2019	2.39	No	12	8.333	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-5	20.08	n/a	9/4/2019	11.9	No	12	0	x^2	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-6	4.061	n/a	9/4/2019	3.21	No	12	8.333	x^2	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-7	4.625	n/a	9/4/2019	4.31	No	12	0	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-8	2.446	n/a	9/3/2019	1.64	No	12	16.67	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-9	3.608	n/a	9/3/2019	2.26	No	12	8.333	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-10	4.351	n/a	9/3/2019	2.84	No	12	8.333	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-11	11.58	n/a	9/3/2019	7.1	No	12	0	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-12	5.735	n/a	9/4/2019	2.73	No	12	8.333	No	0.000...	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-13	5.051	n/a	9/4/2019	3.33	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-2	11.01	n/a	9/4/2019	9.25	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-3	36.48	n/a	9/4/2019	10.9	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-14S	18.81	n/a	9/4/2019	6.37	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-15	5.672	n/a	9/4/2019	2.3	No	12	8.333	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-1	6.639	n/a	9/4/2019	4.82	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-5	87.55	n/a	9/4/2019	56.3	No	12	0	sqr(x)	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-6	5.453	n/a	9/4/2019	0.5ND	No	12	41.67	In(x)	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-7	15.43	n/a	9/4/2019	10.1	No	12	0	No	0.000...	Param Intra 1 of 2
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>3.582</b>	<b>n/a</b>	<b>9/3/2019</b>	<b>4.15</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.000...</b>	<b>Param Intra 1 of 2</b>
Sulfate (mg/L)	GN-GSA-MW-9	6.71	n/a	9/3/2019	6.53	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-10	2.35	n/a	9/3/2019	1.73	No	12	16.67	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-11	15.8	n/a	9/3/2019	2.83	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-12	17.05	n/a	9/4/2019	6.25	No	12	0	No	0.000...	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-13	10.73	n/a	9/4/2019	8.18	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-2	311.9	n/a	9/4/2019	297	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-3	407.7	n/a	9/4/2019	225	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-14S	229.7	n/a	9/4/2019	195	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-15	63.78	n/a	9/4/2019	28	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-1	263.1	n/a	9/4/2019	200	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-5	415.4	n/a	9/4/2019	388	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-6	30	n/a	9/4/2019	12.5ND	No	12	66.67	n/a	0.01077	NP Intra (NDs) 1 of 2
TDS (mg/L)	GN-GSA-MW-7	256.2	n/a	9/4/2019	233	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-8	205.2	n/a	9/3/2019	184	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-9	216.4	n/a	9/3/2019	189	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-10	282.1	n/a	9/3/2019	260	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-11	113.2	n/a	9/3/2019	51.3	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-12	280.7	n/a	9/4/2019	217	No	12	0	No	0.000...	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-13	349.6	n/a	9/4/2019	271	No	12	0	No	0.000...	Param Intra 1 of 2

Within Limit

## Prediction Limit

Intrawell Parametric

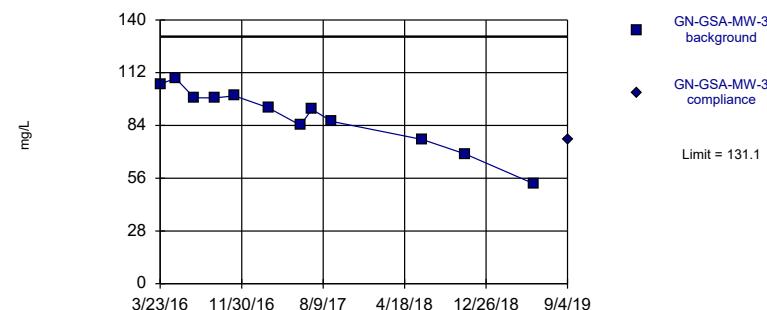


Background Data Summary: Mean=81.19, Std. Dev.=6.554, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8405, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=88.88, Std. Dev.=16.26, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9269, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

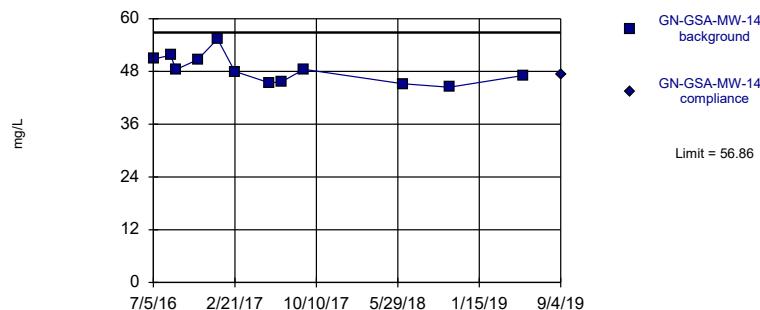
Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

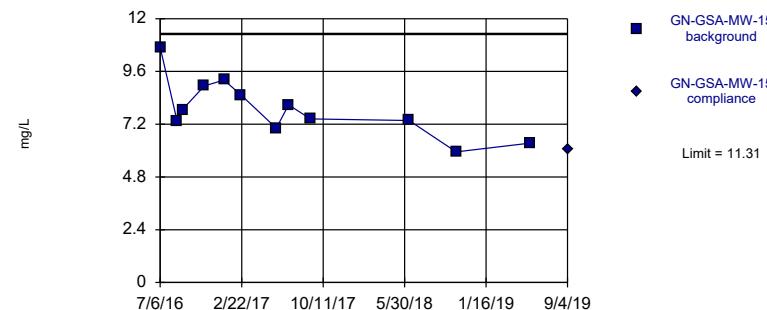


Background Data Summary: Mean=48.44, Std. Dev.=3.238, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9354, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=7.898, Std. Dev.=1.312, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.967, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

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GN-GSA-MW-2    GN-GSA-MW-2

3/23/2016	75.3
5/10/2016	75.7
7/5/2016	78.8
9/6/2016	84.3
11/8/2016	87.2
2/21/2017	80
5/31/2017	75.2
7/5/2017	77.2
9/5/2017	77.5
6/12/2018	78.9
10/22/2018	96.9
5/20/2019	87.3
9/4/2019	89.8

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

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GN-GSA-MW-3    GN-GSA-MW-3

3/23/2016	106
5/10/2016	109
7/6/2016	98.7
9/7/2016	98.6
11/8/2016	99.7
2/20/2017	93.4
5/31/2017	84.1
7/5/2017	92.6
9/5/2017	86.1
6/12/2018	76.5
10/23/2018	68.8
5/22/2019	53.1
9/4/2019	76.4

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-14S GN-GSA-MW-14S

7/5/2016	50.8
8/23/2016	51.7
9/7/2016	48.4
11/8/2016	50.7
1/3/2017	55.4
2/21/2017	48
5/31/2017	45.4
7/5/2017	45.7
9/5/2017	48.5
6/12/2018	45.2
10/23/2018	44.4
5/22/2019	47.1
9/4/2019	47.4

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

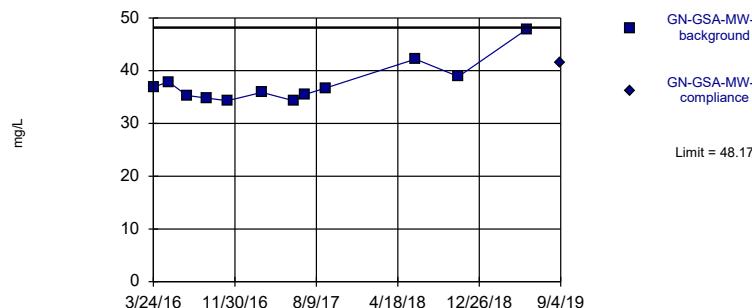
GN-GSA-MW-15 GN-GSA-MW-15

7/6/2016	10.7
8/23/2016	7.34
9/7/2016	7.86
11/8/2016	8.94
1/3/2017	9.21
2/20/2017	8.53
5/31/2017	7.02
7/5/2017	8.08
9/5/2017	7.44
6/12/2018	7.37
10/23/2018	5.94
5/22/2019	6.34
9/4/2019	6.07

Within Limit

## Prediction Limit

Intrawell Parametric

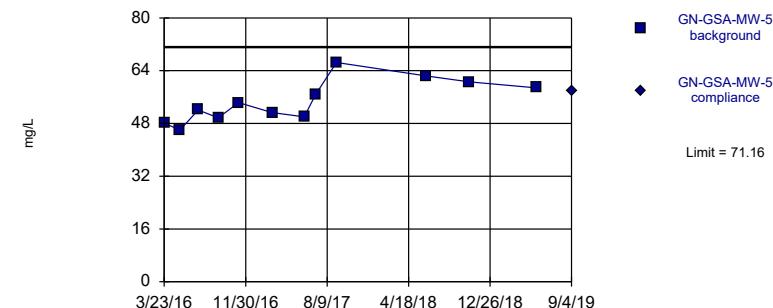


Background Data Summary (based on natural log transformation): Mean=3.621, Std. Dev.=0.09767, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8141, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=54.73, Std. Dev.=6.323, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

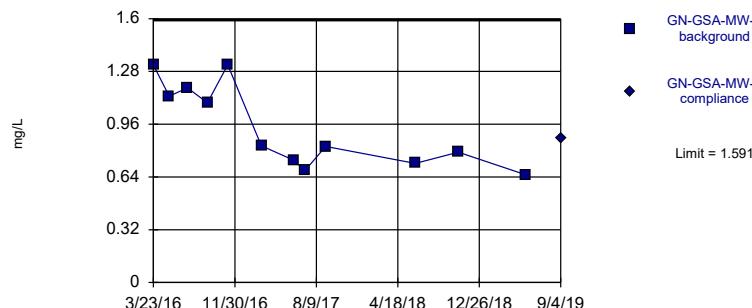
Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

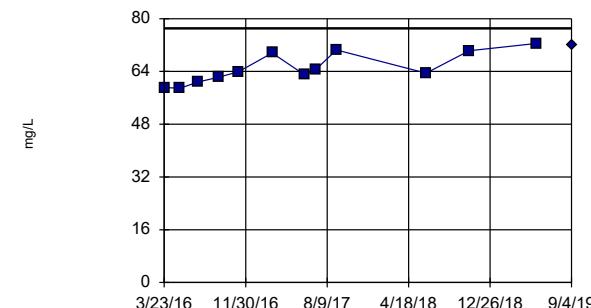


Background Data Summary: Mean=0.9401, Std. Dev.=0.2504, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.871, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=64.91, Std. Dev.=4.678, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9097, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	36.9	
5/10/2016	37.9	
7/5/2016	35.3	
9/6/2016	34.8	
11/8/2016	34.3	
2/22/2017	35.9	
5/31/2017	34.3	
7/5/2017	35.5	
9/7/2017	36.7	
6/12/2018	42.2	
10/23/2018	38.9	
5/21/2019	47.8	
9/4/2019		41.4

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-5    GN-GSA-MW-5

3/23/2016	48.1
5/11/2016	46
7/6/2016	52.1
9/6/2016	49.7
11/8/2016	54.3
2/20/2017	51.3
5/30/2017	50
7/5/2017	56.9
9/7/2017	66.5
6/11/2018	62.4
10/22/2018	60.6
5/20/2019	58.8
9/4/2019	57.9

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-6	GN-GSA-MW-6
3/23/2016	1.32	
5/11/2016	1.13	
7/6/2016	1.18	
9/6/2016	1.09	
11/8/2016	1.32	
2/20/2017	0.829	
5/30/2017	0.743	
7/5/2017	0.68	
9/7/2017	0.825	
6/11/2018	0.722	
10/22/2018	0.79	
5/20/2019	0.652	
9/4/2019		0.872

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

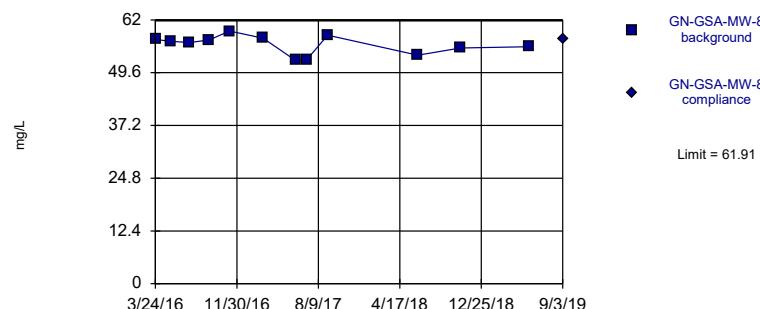
GN-GSA-MW-7    GN-GSA-MW-7

3/23/2016	59.1
5/11/2016	58.9
7/6/2016	60.8
9/6/2016	62.2
11/8/2016	63.9
2/20/2017	69.6
5/31/2017	63
7/5/2017	64.6
9/7/2017	70.5
6/11/2018	63.5
10/22/2018	70.3
5/20/2019	72.5
9/4/2019	72

Within Limit

## Prediction Limit

Intrawell Parametric

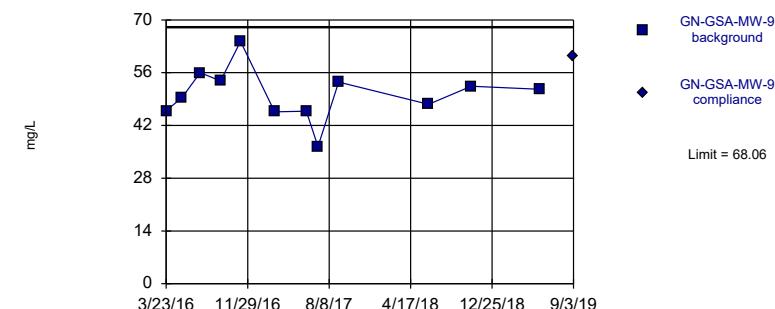


Background Data Summary: Mean=56.16, Std. Dev.=2.214, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.931, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=50.19, Std. Dev.=6.875, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9586, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

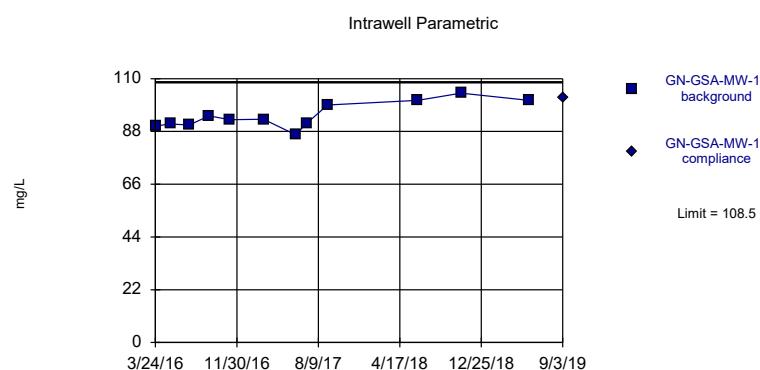
Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

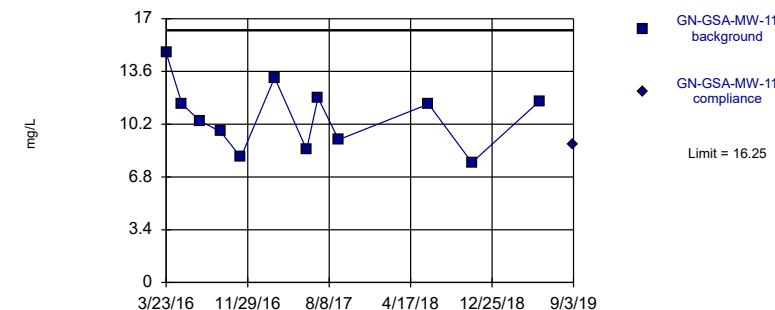


Background Data Summary: Mean=94.64, Std. Dev.=5.346, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9235, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=10.69, Std. Dev.=2.14, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9598, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-8
3/24/2016	57.4	
5/11/2016	57	
7/6/2016	56.7	
9/6/2016	57.3	
11/8/2016	59.4	
2/20/2017	57.7	
5/30/2017	52.5	
7/5/2017	52.7	
9/7/2017	58.4	
6/12/2018	53.7	
10/22/2018	55.4	
5/21/2019	55.7	
9/3/2019		57.4

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	45.9	
5/11/2016	49.4	
7/6/2016	56	
9/7/2016	53.8	
11/8/2016	64.3	
2/21/2017	45.6	
5/30/2017	45.8	
7/5/2017	36.4	
9/7/2017	53.5	
6/12/2018	47.6	
10/22/2018	52.4	
5/21/2019	51.6	
9/3/2019		60.3

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-10 GN-GSA-MW-10

3/24/2016	90.3
5/11/2016	91.1
7/6/2016	90.7
9/6/2016	94.5
11/9/2016	92.9
2/21/2017	93.1
5/31/2017	86.6
7/5/2017	91.5
9/7/2017	99
6/12/2018	101
10/24/2018	104
5/21/2019	101
9/3/2019	102

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

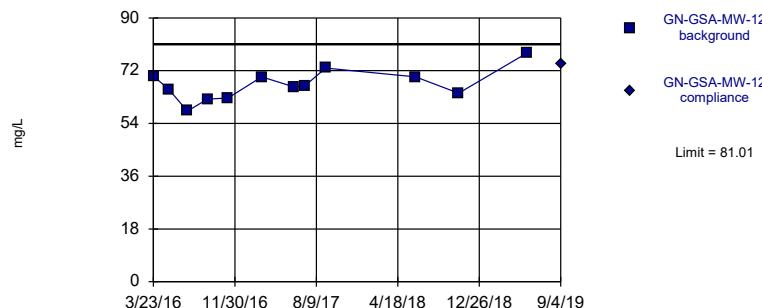
GN-GSA-MW-11 GN-GSA-MW-11

3/23/2016	14.8
5/11/2016	11.5
7/6/2016	10.4
9/7/2016	9.73
11/9/2016	8.07
2/21/2017	13.2
5/31/2017	8.56
7/5/2017	11.9
9/7/2017	9.2
6/12/2018	11.5
10/24/2018	7.73
5/21/2019	11.7
9/3/2019	8.9

Within Limit

Prediction Limit

Intrawell Parametric

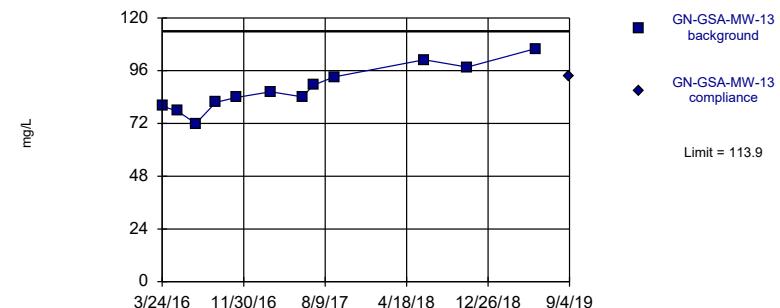


Background Data Summary: Mean=67.28, Std. Dev.=5.286, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9815, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=87.73, Std. Dev.=10.09, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9717, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

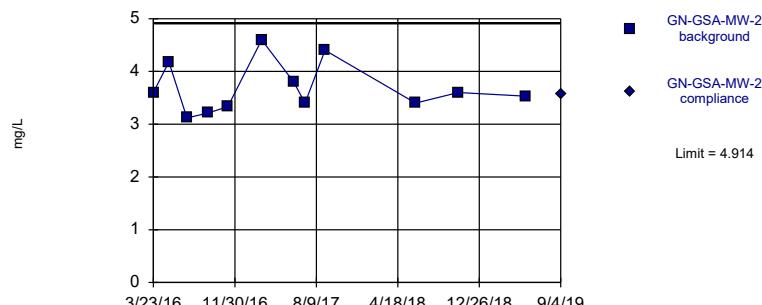
Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Calcium Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit

Intrawell Parametric

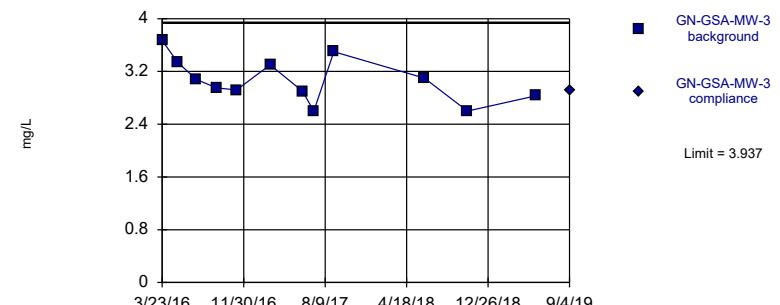


Constituent: Chloride Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit

Intrawell Parametric



## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-12 GN-GSA-MW-12

3/23/2016	70.2
5/10/2016	65.6
7/6/2016	58.2
9/6/2016	62.3
11/9/2016	62.7
2/21/2017	69.9
5/31/2017	66.5
7/5/2017	66.9
9/7/2017	72.9
6/12/2018	69.9
10/23/2018	64.3
5/21/2019	77.9
9/4/2019	74.2

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-13 GN-GSA-MW-13

3/24/2016	79.9
5/10/2016	77.6
7/6/2016	72
9/6/2016	81.6
11/8/2016	83.8
2/22/2017	86.4
5/31/2017	84.1
7/5/2017	89.5
9/7/2017	93.2
6/12/2018	101
10/23/2018	97.6
5/21/2019	106
9/4/2019	93.7

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

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GN-GSA-MW-2    GN-GSA-MW-2

3/23/2016	3.6
5/10/2016	4.18
7/5/2016	3.12
9/6/2016	3.21
11/8/2016	3.33
2/21/2017	4.6
5/31/2017	3.8
7/5/2017	3.4
9/5/2017	4.4
6/12/2018	3.4
10/22/2018	3.6
5/20/2019	3.53
9/4/2019	3.56

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

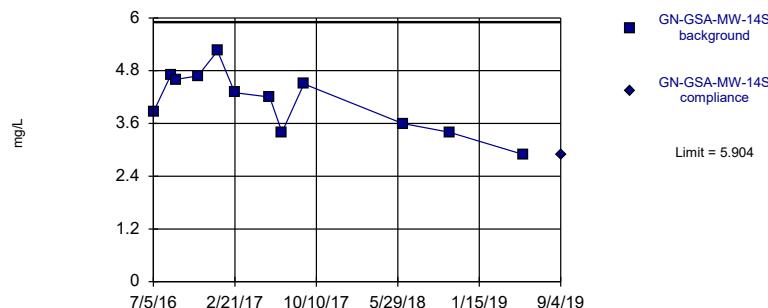
GN-GSA-MW-3    GN-GSA-MW-3

3/23/2016	3.67
5/10/2016	3.34
7/6/2016	3.08
9/7/2016	2.95
11/8/2016	2.92
2/20/2017	3.3
5/31/2017	2.9
7/5/2017	2.6
9/5/2017	3.5
6/12/2018	3.1
10/23/2018	2.6
5/22/2019	2.83
9/4/2019	2.92

Within Limit

## Prediction Limit

Intrawell Parametric



## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-14S GN-GSA-MW-14S

7/5/2016	3.86
8/23/2016	4.69
9/7/2016	4.6
11/8/2016	4.68
1/3/2017	5.25
2/21/2017	4.3
5/31/2017	4.2
7/5/2017	3.4
9/5/2017	4.5
6/12/2018	3.6
10/23/2018	3.4
5/22/2019	2.89
9/4/2019	2.88

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-15 GN-GSA-MW-15

7/6/2016	3.78
8/23/2016	3.47
9/7/2016	3.4
11/8/2016	3.29
1/3/2017	3.11
2/20/2017	2.7
5/31/2017	2.3
7/5/2017	2
9/5/2017	<2 (U*)
6/12/2018	2
10/23/2018	1.5 (J)
5/22/2019	1.75
9/4/2019	1.95

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-1    GN-GSA-MW-1

3/24/2016	3.35
5/10/2016	3.06
7/5/2016	2.9
9/6/2016	2.54
11/8/2016	2.34
2/22/2017	2.9
5/31/2017	2.7
7/5/2017	2.2
9/7/2017	<2 (U*)
6/12/2018	2.4
10/23/2018	2.1
5/21/2019	2.6
9/4/2019	2.39

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

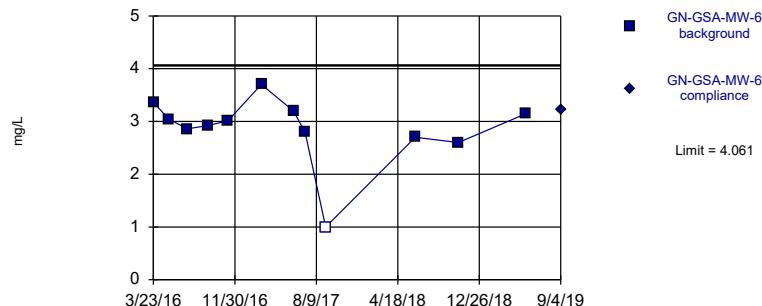
GN-GSA-MW-5    GN-GSA-MW-5

3/23/2016	4.84
5/11/2016	4.19
7/6/2016	4.67
9/6/2016	4.23
11/8/2016	4.51
2/20/2017	5.8
5/30/2017	13
7/5/2017	17
9/7/2017	17
6/11/2018	14
10/22/2018	14
5/20/2019	12.9
9/4/2019	11.9

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

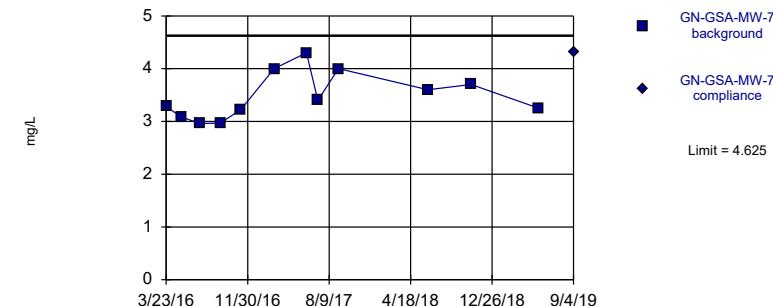


Background Data Summary (based on square transformation); Mean=8.587, Std. Dev.=3.042, n=12, 8.333% NDs.  
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9033, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2,  
event alpha = 0.05132). Report alpha = 0.0007523.

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Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=3.48, Std. Dev.=0.4404, n=12, Normality test: Shapiro Wilk @alpha = 0.01,  
calculated = 0.9241, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha =  
0.0007523.

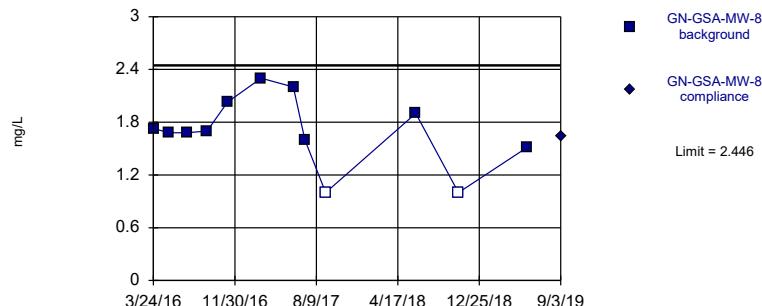
Constituent: Chloride Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Chloride Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

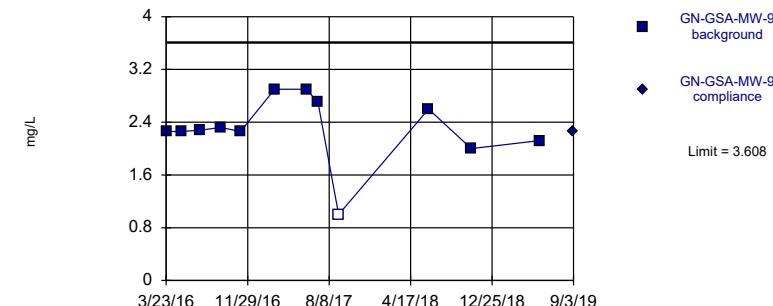


Background Data Summary (after Kaplan-Meier Adjustment): Mean=1.795, Std. Dev.=0.2504, n=12, 16.67% NDs.  
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9252, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2,  
event alpha = 0.05132). Report alpha = 0.0007523.

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=2.3, Std. Dev.=0.5034, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8459, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Chloride Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

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GN-GSA-MW-6    GN-GSA-MW-6

3/23/2016	3.36
5/11/2016	3.04
7/6/2016	2.86
9/6/2016	2.92
11/8/2016	3.01
2/20/2017	3.7
5/30/2017	3.2
7/5/2017	2.8
9/7/2017	<2 (U*)
6/11/2018	2.7
10/22/2018	2.6
5/20/2019	3.15
9/4/2019	3.21

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-7    GN-GSA-MW-7

3/23/2016	3.28
5/11/2016	3.08
7/6/2016	2.96
9/6/2016	2.97
11/8/2016	3.22
2/20/2017	4
5/31/2017	4.3
7/5/2017	3.4
9/7/2017	4
6/11/2018	3.6
10/22/2018	3.7
5/20/2019	3.25
9/4/2019	4.31

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

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GN-GSA-MW-8    GN-GSA-MW-8

3/24/2016	1.73
5/11/2016	1.68
7/6/2016	1.68
9/6/2016	1.7
11/8/2016	2.03
2/20/2017	2.3
5/30/2017	2.2
7/5/2017	1.6 (J)
9/7/2017	<2 (U*)
6/12/2018	1.9 (J)
10/22/2018	<2
5/21/2019	1.51
9/3/2019	1.64

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

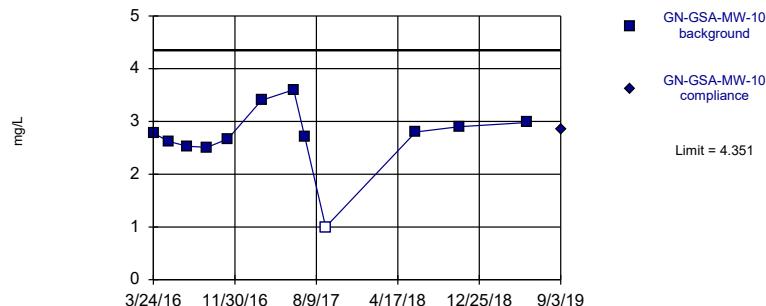
GN-GSA-MW-9    GN-GSA-MW-9

3/23/2016	2.26
5/11/2016	2.26
7/6/2016	2.28
9/7/2016	2.32
11/8/2016	2.26
2/21/2017	2.9
5/30/2017	2.9
7/5/2017	2.7
9/7/2017	<2 (U*)
6/12/2018	2.6
10/22/2018	2
5/21/2019	2.12
9/3/2019	2.26

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

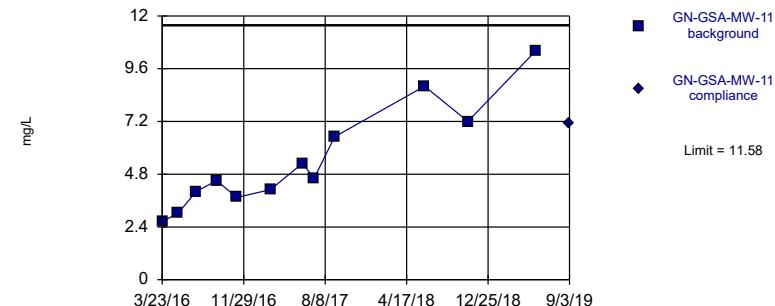


Background Data Summary: Mean=2.708, Std. Dev.=0.6322, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8072, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG

Within Limit

Prediction Limit  
Intrawell Parametric

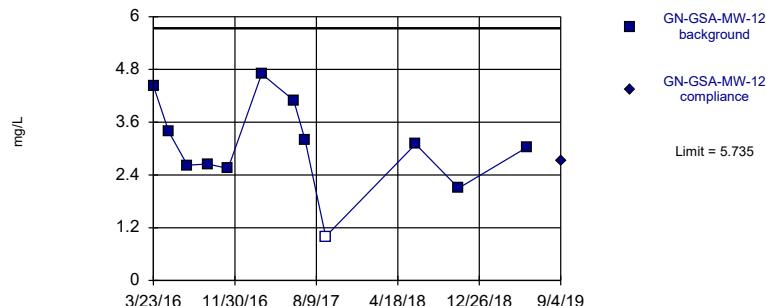


Background Data Summary: Mean=5.402, Std. Dev.=2.376, n=12, Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9034, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric



Constituent: Chloride Analysis Run 1/17/2020 1:04 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Intrawell Parametric

mg/L

Limit = 5.051

Date	GN-GSA-MW-13 background (mg/L)	GN-GSA-MW-13 compliance (mg/L)
3/24/16	2.8	2.8
4/1/16	3.5	3.5
4/15/16	3.5	3.5
5/1/16	4.8	4.8
5/15/16	4.8	4.8
6/1/16	4.8	4.8
6/15/16	4.8	4.8
7/1/16	4.8	4.8
7/15/16	4.8	4.8
8/1/16	4.8	4.8
8/15/16	4.8	4.8
9/1/16	4.8	4.8
9/15/16	4.8	4.8
10/1/16	4.8	4.8
10/15/16	4.8	4.8
11/1/16	4.8	4.8
11/15/16	4.8	4.8
12/1/16	4.8	4.8
12/15/16	4.8	4.8
1/1/17	4.8	4.8
1/15/17	4.8	4.8
2/1/17	4.8	4.8
2/15/17	4.8	4.8
3/1/17	4.8	4.8
3/15/17	4.8	4.8
4/1/17	4.8	4.8
4/15/17	4.8	4.8
5/1/17	4.8	4.8
5/15/17	4.8	4.8
6/1/17	4.8	4.8
6/15/17	4.8	4.8
7/1/17	4.8	4.8
7/15/17	4.8	4.8
8/1/17	4.8	4.8
8/15/17	4.8	4.8
9/1/17	4.8	4.8
9/15/17	4.8	4.8
10/1/17	4.8	4.8
10/15/17	4.8	4.8
11/1/17	4.8	4.8
11/15/17	4.8	4.8
12/1/17	4.8	4.8
12/15/17	4.8	4.8
1/1/18	4.8	4.8
1/15/18	4.8	4.8
2/1/18	4.8	4.8
2/15/18	4.8	4.8
3/1/18	4.8	4.8
3/15/18	4.8	4.8
4/1/18	4.8	4.8
4/15/18	4.8	4.8
5/1/18	4.8	4.8
5/15/18	4.8	4.8
6/1/18	4.8	4.8
6/15		

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-10 GN-GSA-MW-10

3/24/2016	2.78
5/11/2016	2.62
7/6/2016	2.53
9/6/2016	2.51
11/9/2016	2.67
2/21/2017	3.4
5/31/2017	3.6
7/5/2017	2.7
9/7/2017	<2 (U*)
6/12/2018	2.8
10/24/2018	2.9
5/21/2019	2.98
9/3/2019	2.84

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-11 GN-GSA-MW-11

3/23/2016	2.64
5/11/2016	3.02
7/6/2016	4.01
9/7/2016	4.51
11/9/2016	3.74
2/21/2017	4.1
5/31/2017	5.3
7/5/2017	4.6
9/7/2017	6.5
6/12/2018	8.8
10/24/2018	7.2
5/21/2019	10.4
9/3/2019	7.1

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-12 GN-GSA-MW-12

3/23/2016	4.43
5/10/2016	3.38
7/6/2016	2.62
9/6/2016	2.65
11/9/2016	2.55
2/21/2017	4.7
5/31/2017	4.1
7/5/2017	3.2
9/7/2017	<2 (U*)
6/12/2018	3.1
10/23/2018	2.1
5/21/2019	3.02
9/4/2019	2.73

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

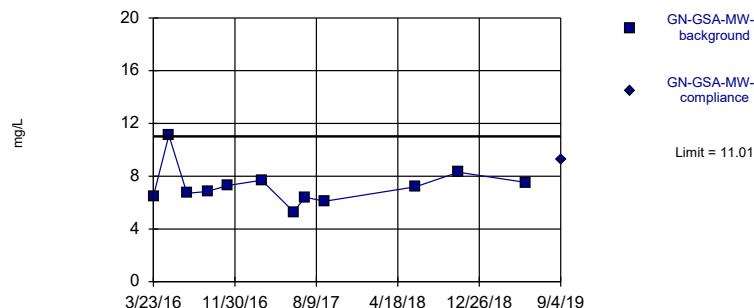
GN-GSA-MW-13 GN-GSA-MW-13

3/24/2016	3.16
5/10/2016	3.02
7/6/2016	3.1
9/6/2016	3.31
11/8/2016	3.32
2/22/2017	4.8
5/31/2017	4
7/5/2017	3.6
9/7/2017	4.5
6/12/2018	3.5
10/23/2018	3.5
5/21/2019	3.3
9/4/2019	3.33

Within Limit

Prediction Limit

Intrawell Parametric

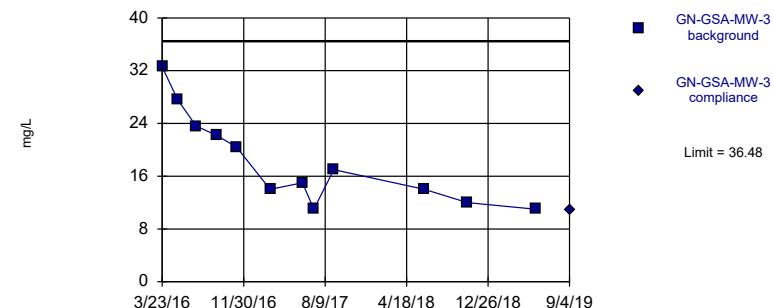


Background Data Summary: Mean=7.246, Std. Dev.=1.449, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8542, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=18.37, Std. Dev.=6.971, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9072, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

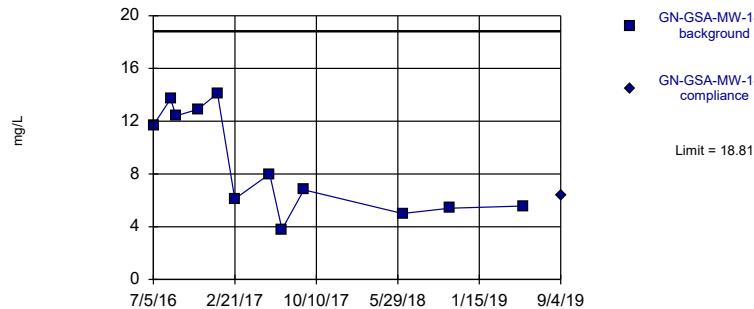
Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit

Intrawell Parametric

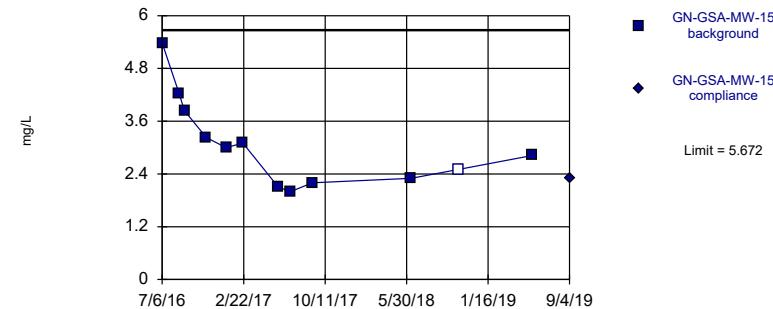


Background Data Summary: Mean=8.789, Std. Dev.=3.857, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8695, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3.058, Std. Dev.=1.006, n=12, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8928, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2	GN-GSA-MW-2
3/23/2016	6.48	
5/10/2016	11.1	
7/5/2016	6.7	
9/6/2016	6.85	
11/8/2016	7.3	
2/21/2017	7.7	
5/31/2017	5.3	
7/5/2017	6.4	
9/5/2017	6.1	
6/12/2018	7.2	
10/22/2018	8.3	
5/20/2019	7.52	
9/4/2019		9.25

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-3	GN-GSA-MW-3
3/23/2016	32.6	
5/10/2016	27.6	
7/6/2016	23.6	
9/7/2016	22.2	
11/8/2016	20.4	
2/20/2017	14	
5/31/2017	15	
7/5/2017	11	
9/5/2017	17	
6/12/2018	14	
10/23/2018	12	
5/22/2019	11	
9/4/2019		10.9

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-14S GN-GSA-MW-14S

7/5/2016	11.7
8/23/2016	13.7
9/7/2016	12.4
11/8/2016	12.9
1/3/2017	14.1
2/21/2017	6.1
5/31/2017	8
7/5/2017	3.8 (J)
9/5/2017	6.8
6/12/2018	5
10/23/2018	5.4
5/22/2019	5.57
9/4/2019	6.37

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

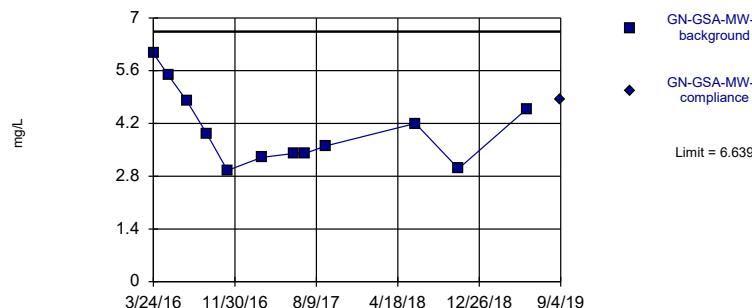
GN-GSA-MW-15 GN-GSA-MW-15

7/6/2016	5.38
8/23/2016	4.23
9/7/2016	3.84
11/8/2016	3.23
1/3/2017	3
2/20/2017	3.1 (J)
5/31/2017	2.1 (J)
7/5/2017	2 (J)
9/5/2017	2.2 (J)
6/12/2018	2.3 (J)
10/23/2018	<5
5/22/2019	2.82
9/4/2019	2.3

Within Limit

Prediction Limit

Intrawell Parametric

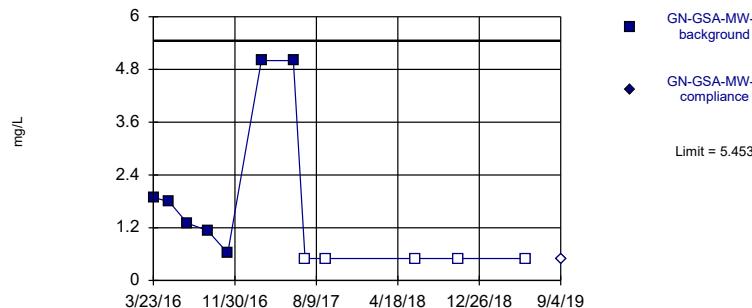


Background Data Summary: Mean=4.056, Std. Dev.=0.9938, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9112, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

Prediction Limit

Intrawell Parametric



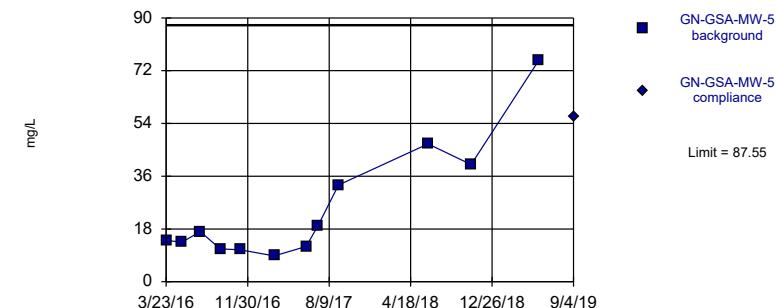
Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=0.02076, Std. Dev.=0.6446, n=12, 41.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8174, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

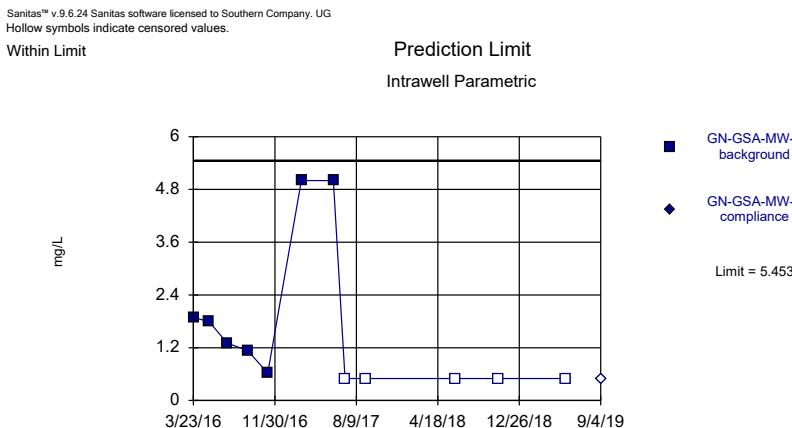
Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=4.718, Std. Dev.=1.785, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8489, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA



Background Data Summary: Mean=10.02, Std. Dev.=2.08, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9737, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	6.06	
5/10/2016	5.47	
7/5/2016	4.8	
9/6/2016	3.91	
11/8/2016	2.95	
2/22/2017	3.3 (J)	
5/31/2017	3.4 (J)	
7/5/2017	3.4 (J)	
9/7/2017	3.6 (J)	
6/12/2018	4.2 (J)	
10/23/2018	3 (J)	
5/21/2019	4.58	
9/4/2019		4.82

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-5    GN-GSA-MW-5

3/23/2016	14.1
5/11/2016	13.5
7/6/2016	17.1
9/6/2016	11.2
11/8/2016	10.9
2/20/2017	8.8
5/30/2017	12
7/5/2017	19
9/7/2017	33
6/11/2018	47
10/22/2018	40
5/20/2019	75.6
9/4/2019	56.3

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

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GN-GSA-MW-6    GN-GSA-MW-6

3/23/2016	1.89
5/11/2016	1.79
7/6/2016	1.3
9/6/2016	1.14
11/8/2016	0.622 (J)
2/20/2017	5
5/30/2017	5
7/5/2017	<1
9/7/2017	<1
6/11/2018	<1
10/22/2018	<1
5/20/2019	<1
9/4/2019	<1

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

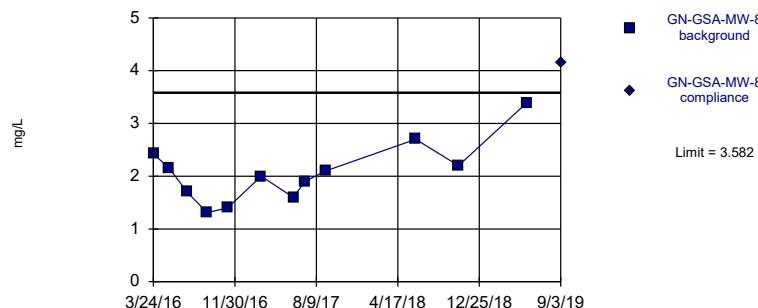
GN-GSA-MW-7    GN-GSA-MW-7

3/23/2016	13.8
5/11/2016	11.9
7/6/2016	11.1
9/6/2016	10.6
11/8/2016	12.1
2/20/2017	9.7
5/31/2017	11
7/5/2017	8.3
9/7/2017	8.6
6/11/2018	7.5
10/22/2018	8.8
5/20/2019	6.85
9/4/2019	10.1

Exceeds Limit

## Prediction Limit

Intrawell Parametric

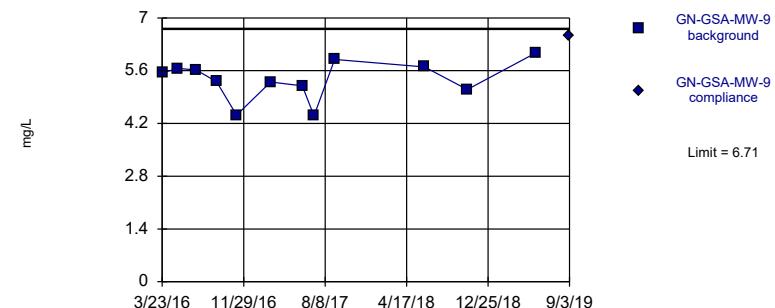


Background Data Summary: Mean=2.073, Std. Dev.=0.5804, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9435, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.352, Std. Dev.=0.5227, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9133, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

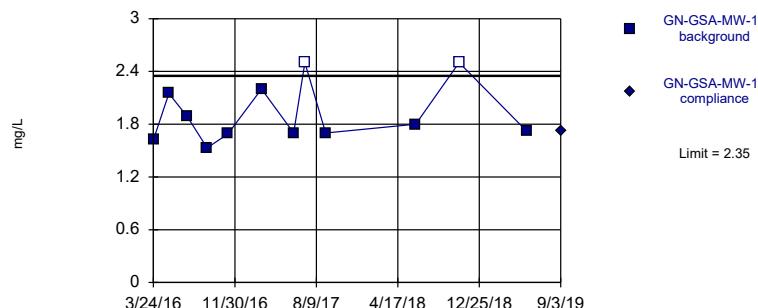
Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

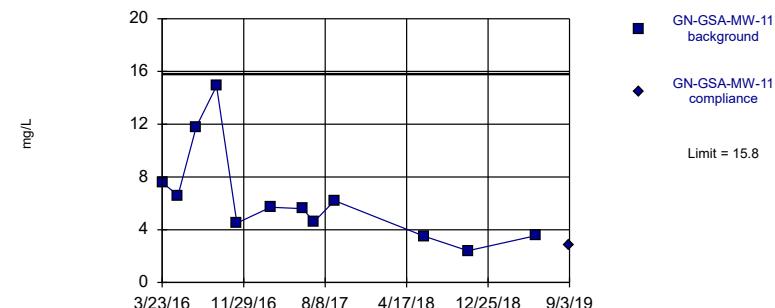


Background Data Summary (after Kaplan-Meier Adjustment): Mean=1.791, Std. Dev.=0.2151, n=12, 16.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8557, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.412, Std. Dev.=3.611, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8491, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-8    GN-GSA-MW-8

3/24/2016	2.42
5/11/2016	2.16
7/6/2016	1.7
9/6/2016	1.31
11/8/2016	1.4
2/20/2017	2 (J)
5/30/2017	1.6 (J)
7/5/2017	1.9 (J)
9/7/2017	2.1 (J)
6/12/2018	2.7 (J)
10/22/2018	2.2 (J)
5/21/2019	3.39
9/3/2019	4.15

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9      GN-GSA-MW-9
3/23/2016	5.54
5/11/2016	5.66
7/6/2016	5.62
9/7/2016	5.31
11/8/2016	4.42
2/21/2017	5.3
5/30/2017	5.2
7/5/2017	4.4 (J)
9/7/2017	5.9
6/12/2018	5.7
10/22/2018	5.1
5/21/2019	6.07
9/3/2019	6.53

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-10 GN-GSA-MW-10

3/24/2016	1.62
5/11/2016	2.15
7/6/2016	1.89
9/6/2016	1.53
11/9/2016	1.69
2/21/2017	2.2 (J)
5/31/2017	1.7 (J)
7/5/2017	<5
9/7/2017	1.7 (J)
6/12/2018	1.8 (J)
10/24/2018	<5
5/21/2019	1.72
9/3/2019	1.73

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

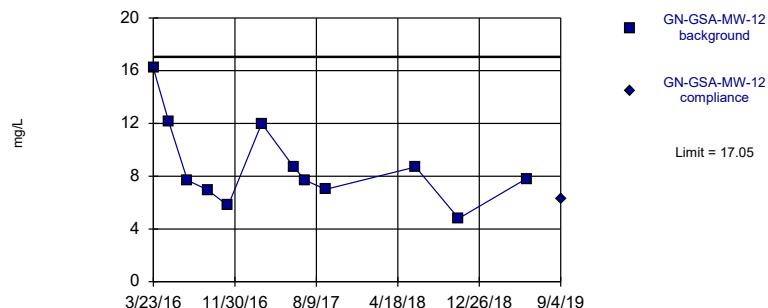
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-11 GN-GSA-MW-11

3/23/2016	7.59
5/11/2016	6.6
7/6/2016	11.8
9/7/2016	14.9
11/9/2016	4.5
2/21/2017	5.7
5/31/2017	5.6
7/5/2017	4.6 (J)
9/7/2017	6.2
6/12/2018	3.5 (J)
10/24/2018	2.4 (J)
5/21/2019	3.55
9/3/2019	2.83

Within Limit

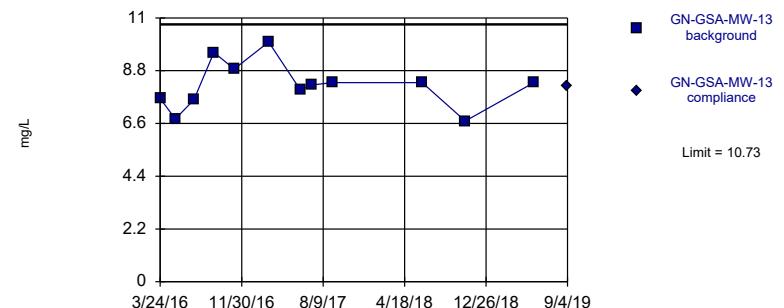
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=8.788, Std. Dev.=3.178, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8809, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

**Prediction Limit**  
Intrawell Parametric



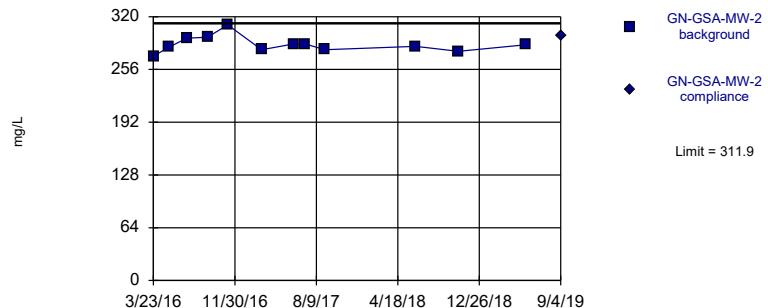
Background Data Summary: Mean=8.187, Std. Dev.=0.9783, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9504, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Sulfate Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

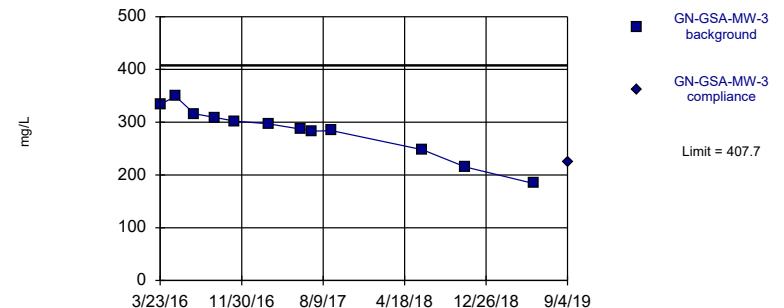
**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=286.3, Std. Dev.=9.847, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9175, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

**Prediction Limit**  
Intrawell Parametric



Background Data Summary: Mean=284, Std. Dev.=47.61, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.926, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-12 GN-GSA-MW-12

3/23/2016	16.2
5/10/2016	12.1
7/6/2016	7.7
9/6/2016	6.97
11/9/2016	5.77
2/21/2017	12
5/31/2017	8.7
7/5/2017	7.7
9/7/2017	7
6/12/2018	8.7
10/23/2018	4.8 (J)
5/21/2019	7.81
9/4/2019	6.25

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-13 GN-GSA-MW-13

3/24/2016	7.64
5/10/2016	6.79
7/6/2016	7.59
9/6/2016	9.56
11/8/2016	8.87
2/22/2017	10
5/31/2017	8
7/5/2017	8.2
9/7/2017	8.3
6/12/2018	8.3
10/23/2018	6.7
5/21/2019	8.29
9/4/2019	8.18

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2	GN-GSA-MW-2
3/23/2016	272	
5/10/2016	283	
7/5/2016	294	
9/6/2016	295	
11/8/2016	310	
2/21/2017	280	
5/31/2017	287	
7/5/2017	287	
9/5/2017	280	
6/12/2018	284	
10/22/2018	278 (D)	
5/20/2019	286	
9/4/2019		297

## Prediction Limit

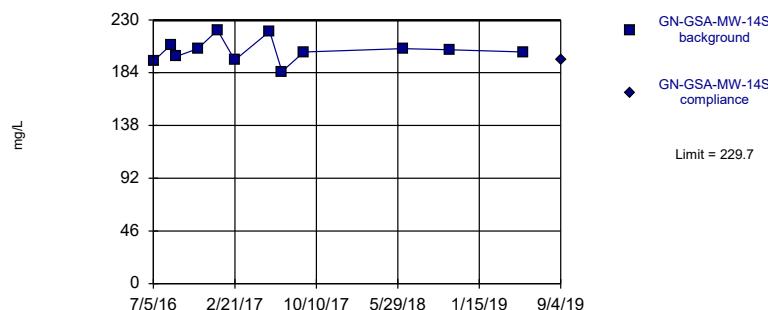
Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-3	GN-GSA-MW-3
3/23/2016	334	
5/10/2016	349	
7/6/2016	316	
9/7/2016	309	
11/8/2016	302	
2/20/2017	297	
5/31/2017	287	
7/5/2017	283	
9/5/2017	284	
6/12/2018	248	
10/23/2018	215 (D)	
5/22/2019	184	
9/4/2019		225

Within Limit

Prediction Limit

Intrawell Parametric

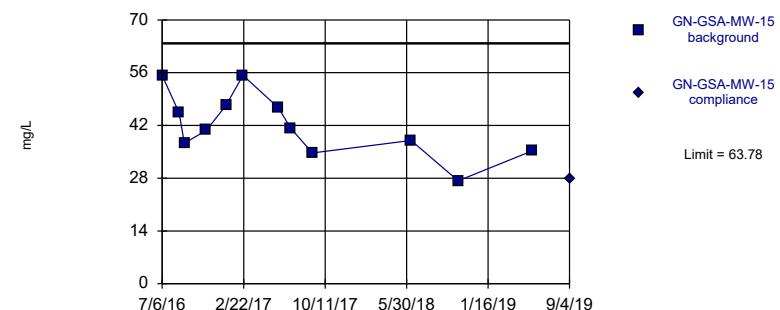


Background Data Summary: Mean=203.3, Std. Dev.=10.19, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9449, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=42.04, Std. Dev.=8.363, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9601, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

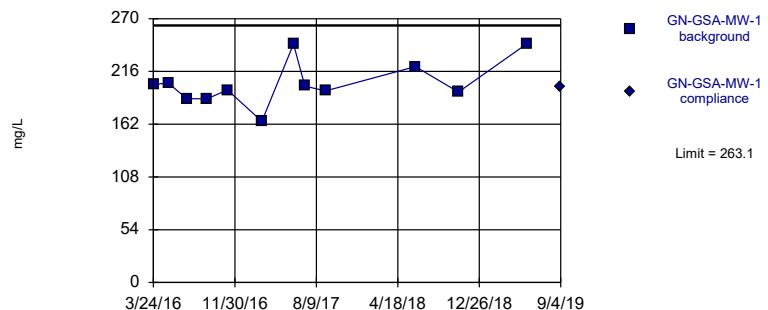
Constituent: TDS Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=203.8, Std. Dev.=22.81, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9007, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=236, Std. Dev.=69.04, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8276, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-14S GN-GSA-MW-14S

7/5/2016	194
8/23/2016	208
9/7/2016	198
11/8/2016	205
1/3/2017	221
2/21/2017	195
5/31/2017	220
7/5/2017	185
9/5/2017	202
6/12/2018	205
10/23/2018	204 (D)
5/22/2019	202
9/4/2019	195

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-15 GN-GSA-MW-15

7/6/2016	55.3
8/23/2016	45.3
9/7/2016	37.3
11/8/2016	40.7
1/3/2017	47.3
2/20/2017	55.3
5/31/2017	46.7
7/5/2017	41.3
9/5/2017	34.7
6/12/2018	38
10/23/2018	27.3 (D)
5/22/2019	35.3
9/4/2019	28

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	203	
5/10/2016	204	
7/5/2016	188	
9/6/2016	188	
11/8/2016	197	
2/22/2017	165	
5/31/2017	244	
7/5/2017	201	
9/7/2017	196	
6/12/2018	221	
10/23/2018	195 (D)	
5/21/2019	244	
9/4/2019		200

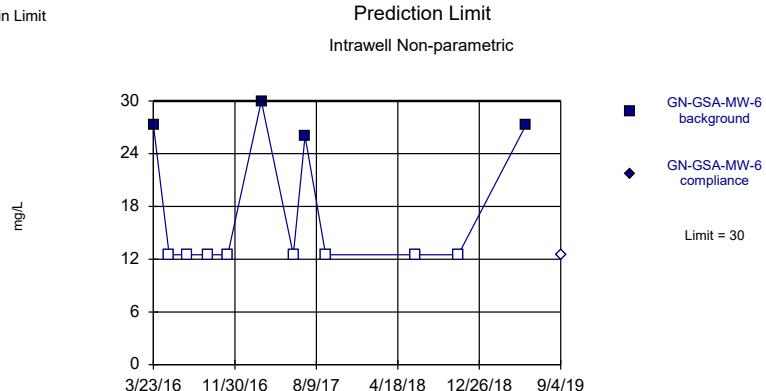
## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	185	
5/11/2016	176	
7/6/2016	203	
9/6/2016	180	
11/8/2016	187	
2/20/2017	205	
5/30/2017	187	
7/5/2017	238	
9/7/2017	269	
6/11/2018	312	
10/22/2018	292 (D)	
5/20/2019	398	
9/4/2019		388

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Hollow symbols indicate censored values.

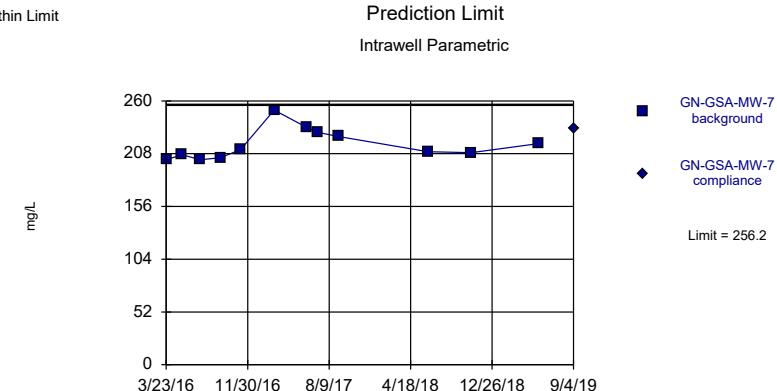
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

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Within Limit



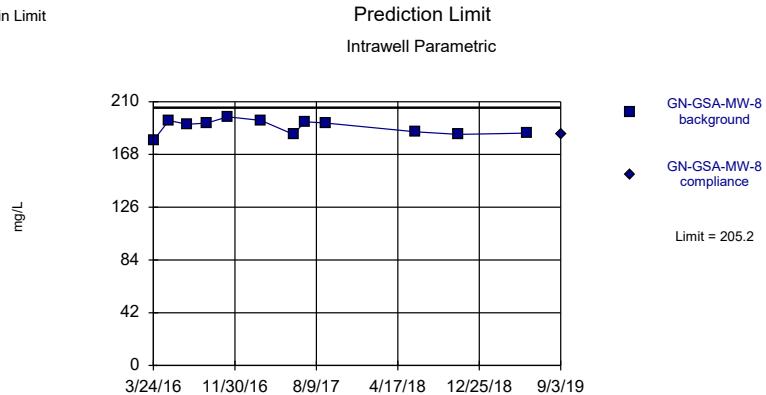
Background Data Summary: Mean=216.9, Std. Dev.=15.11, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8828, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 1/17/2020 1:05 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 1/17/2020 1:06 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

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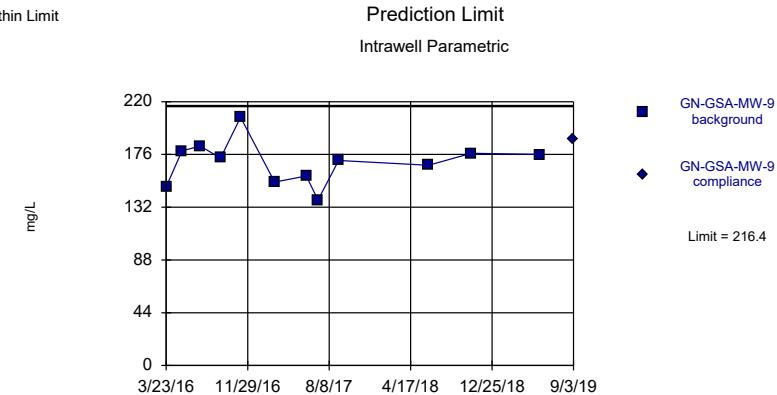
Within Limit



Background Data Summary: Mean=189.8, Std. Dev.=5.921, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9111, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

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Within Limit



Background Data Summary: Mean=169.3, Std. Dev.=18.13, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.966, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 1/17/2020 1:06 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 1/17/2020 1:06 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-6    GN-GSA-MW-6

3/23/2016	27.3
5/11/2016	<25
7/6/2016	<25
9/6/2016	<25
11/8/2016	<25
2/20/2017	30
5/30/2017	<25
7/5/2017	26
9/7/2017	<25
6/11/2018	<25
10/22/2018	<25 (D)
5/20/2019	27.3
9/4/2019	<25

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	202	
5/11/2016	207	
7/6/2016	202	
9/6/2016	204	
11/8/2016	212	
2/20/2017	251	
5/31/2017	234	
7/5/2017	229	
9/7/2017	225	
6/11/2018	210	
10/22/2018	209 (D)	
5/20/2019	218	
9/4/2019		233

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-8
3/24/2016	179	
5/11/2016	195	
7/6/2016	192	
9/6/2016	193	
11/8/2016	198	
2/20/2017	195	
5/30/2017	184	
7/5/2017	194	
9/7/2017	193	
6/12/2018	186	
10/22/2018	184 (D)	
5/21/2019	185	
9/3/2019		184

## Prediction Limit

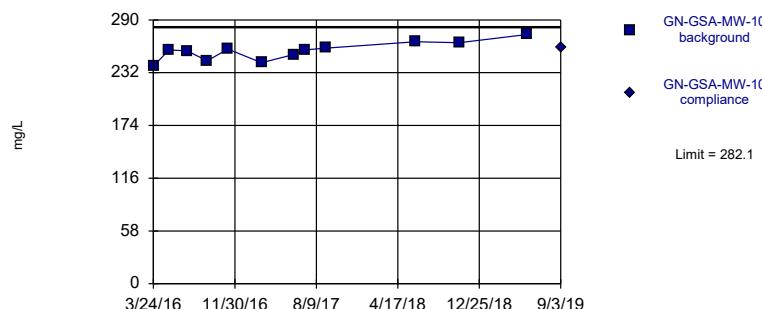
Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	149	
5/11/2016	179	
7/6/2016	183	
9/7/2016	173	
11/8/2016	207	
2/21/2017	153	
5/30/2017	158	
7/5/2017	138	
9/7/2017	171	
6/12/2018	167	
10/22/2018	177 (D)	
5/21/2019	176	
9/3/2019		189

Within Limit

## Prediction Limit

Intrawell Parametric

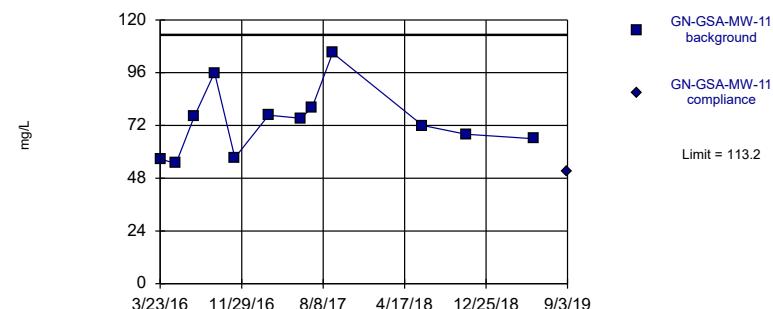


Background Data Summary: Mean=255.9, Std. Dev.=10.07, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9649, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=73.64, Std. Dev.=15.22, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9223, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

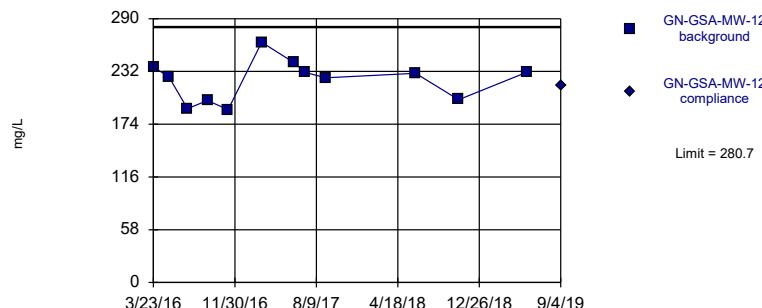
Constituent: TDS Analysis Run 1/17/2020 1:06 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 1/17/2020 1:06 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

## Prediction Limit

Intrawell Parametric

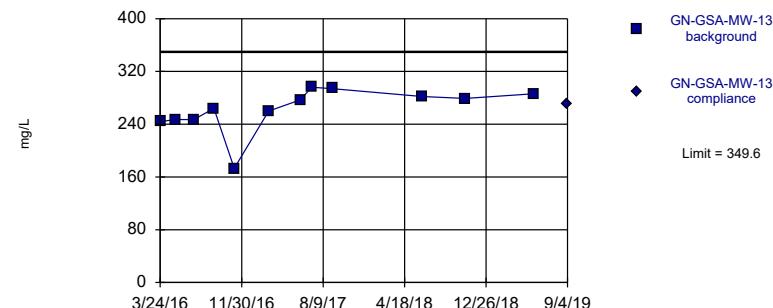


Background Data Summary: Mean=222.3, Std. Dev.=22.46, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9236, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Within Limit

## Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=262.4, Std. Dev.=33.54, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8216, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 1/17/2020 1:06 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: TDS Analysis Run 1/17/2020 1:06 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-10 GN-GSA-MW-10

3/24/2016	239
5/11/2016	257
7/6/2016	256
9/6/2016	245
11/9/2016	258
2/21/2017	243
5/31/2017	252
7/5/2017	257
9/7/2017	259
6/12/2018	266
10/24/2018	265 (D)
5/21/2019	274
9/3/2019	260

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-11 GN-GSA-MW-11

3/23/2016	56.7
5/11/2016	54.7
7/6/2016	76
9/7/2016	96
11/9/2016	57.3
2/21/2017	76.7
5/31/2017	75.3
7/5/2017	80
9/7/2017	105
6/12/2018	72
10/24/2018	68 (D)
5/21/2019	66
9/3/2019	51.3

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL

Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-12 GN-GSA-MW-12

3/23/2016	237
5/10/2016	226
7/6/2016	191
9/6/2016	200
11/9/2016	190
2/21/2017	264
5/31/2017	242
7/5/2017	231
9/7/2017	225
6/12/2018	230
10/23/2018	201 (D)
5/21/2019	231
9/4/2019	217

## Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 1:08 PM View: Intrawell PL  
Plant Gaston Client: Southern Company Data: Gaston GSA

GN-GSA-MW-13 GN-GSA-MW-13

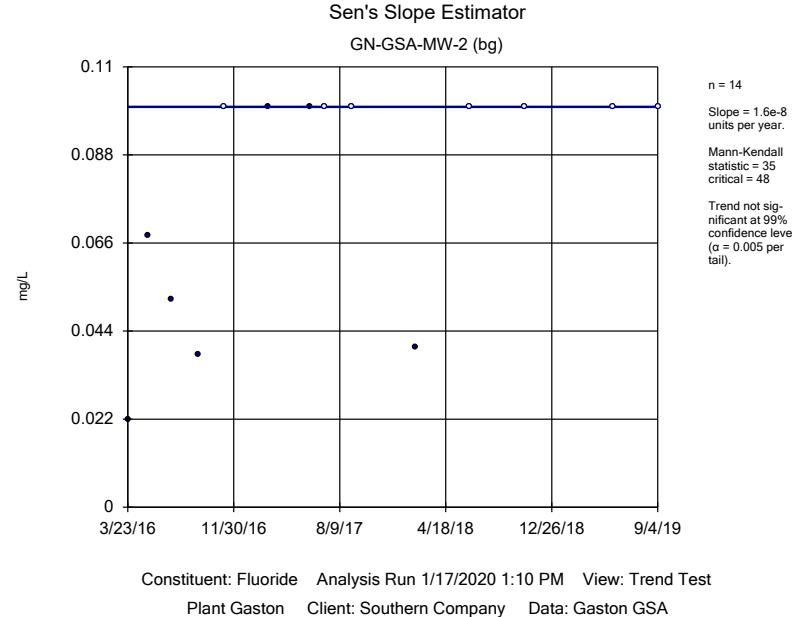
3/24/2016	244
5/10/2016	247
7/6/2016	247
9/6/2016	264
11/8/2016	173
2/22/2017	260
5/31/2017	277
7/5/2017	296
9/7/2017	294
6/12/2018	282
10/23/2018	279 (D)
5/21/2019	286
9/4/2019	271

# Trend Test Summary Table

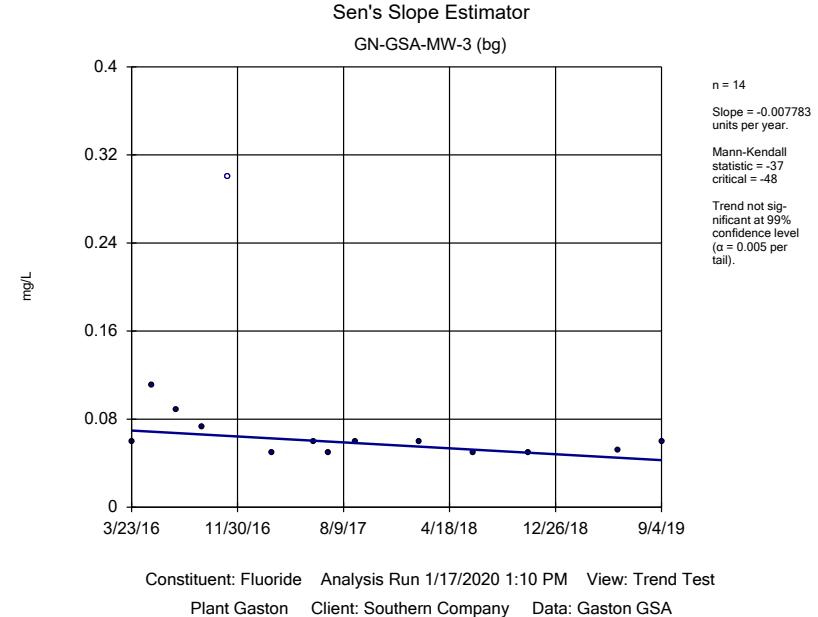
Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:11 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	GN-GSA-MW-2 (bg)	1.6e-8	35	48	No	14	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-3 (bg)	-0.00...	-37	-48	No	14	7.143	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-14S (bg)	-0.00...	-21	-48	No	14	14.29	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-15 (bg)	6.6e-10	30	48	No	14	64.29	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-1	0.002834	9	48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-8	-0.01062	-37	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-2 (bg)	-0.00...	-20	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-3 (bg)	-0.05026	-30	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-14S (bg)	0.008838	7	48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-15 (bg)	-0.04446	-37	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-6	-0.05564	-34	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-11	-0.02312	-13	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-2 (bg)	0.3509	16	43	No	13	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-5.138</b>	<b>-64</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GN-GSA-MW-14S (bg)	-2.815	-34	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-0.8362	-41	-43	No	13	7.692	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-8	0.4538	34	43	No	13	0	n/a	n/a	0.01	NP

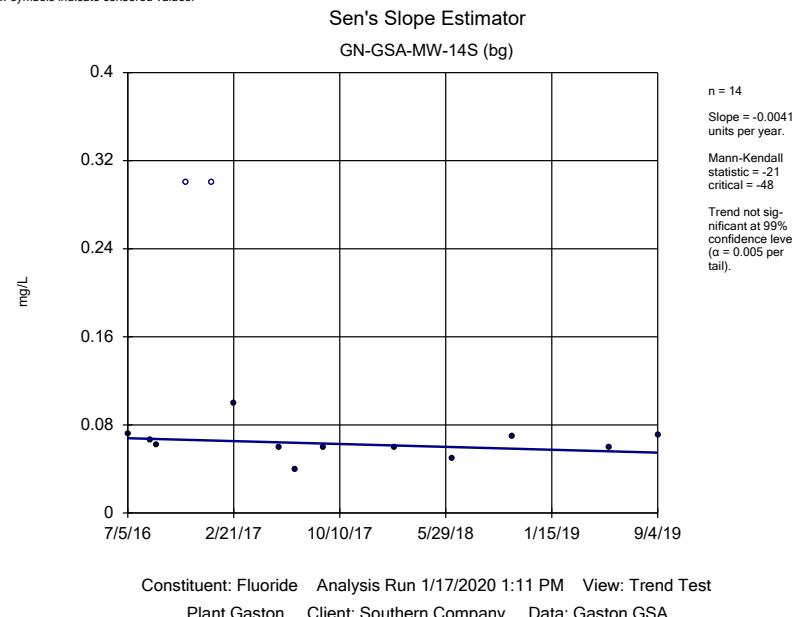
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.



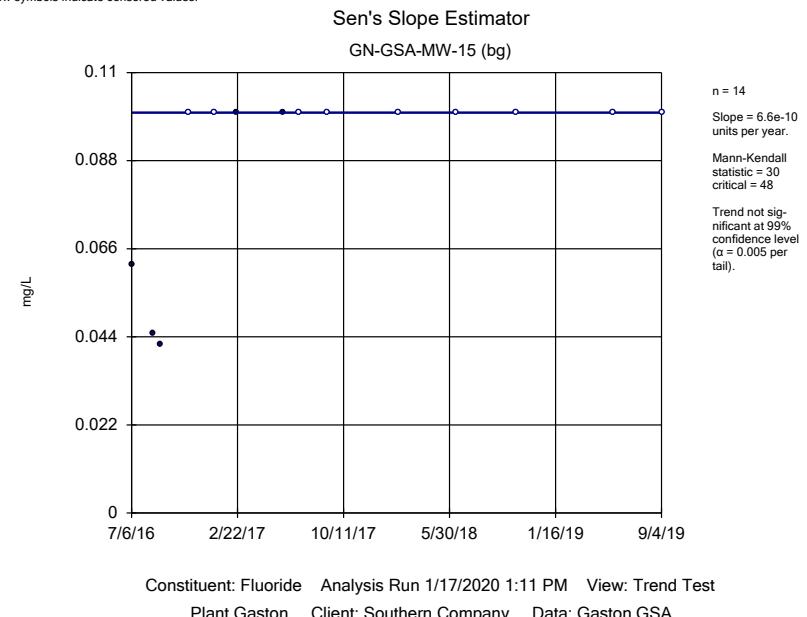
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

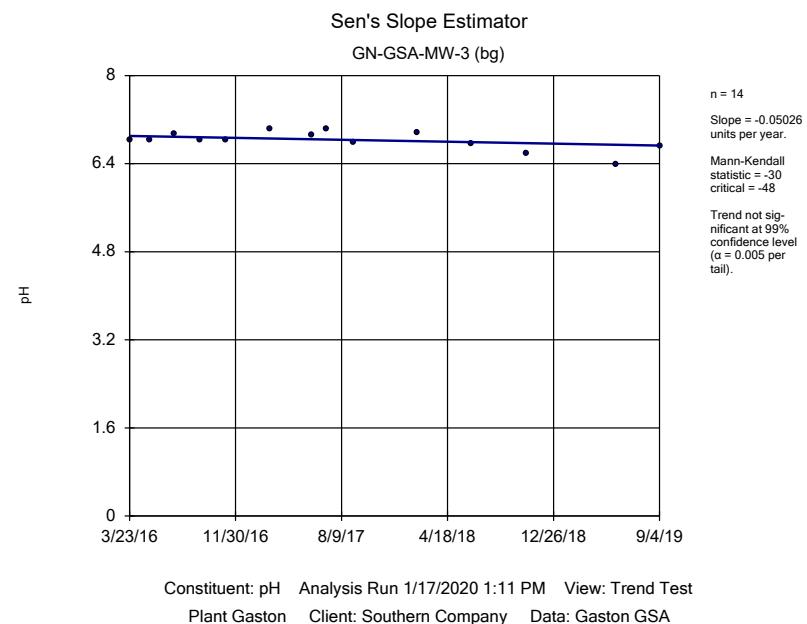
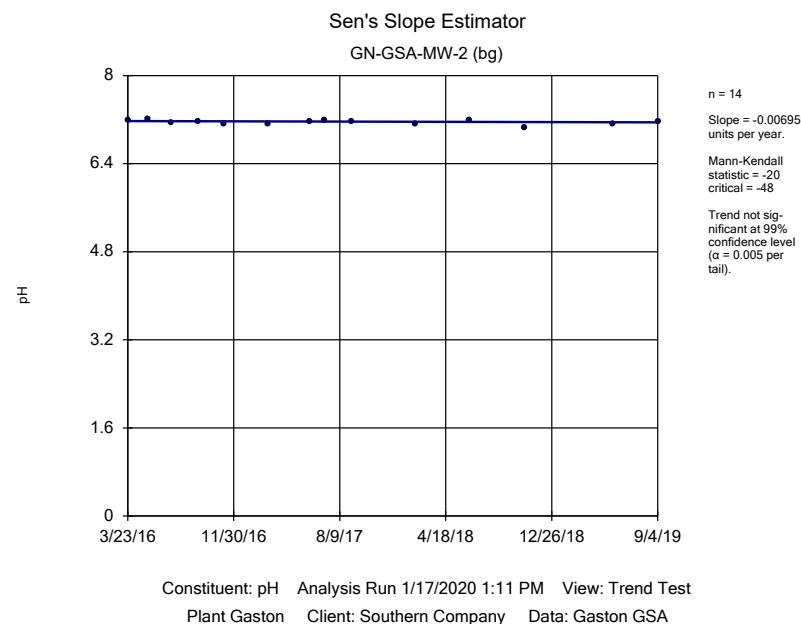
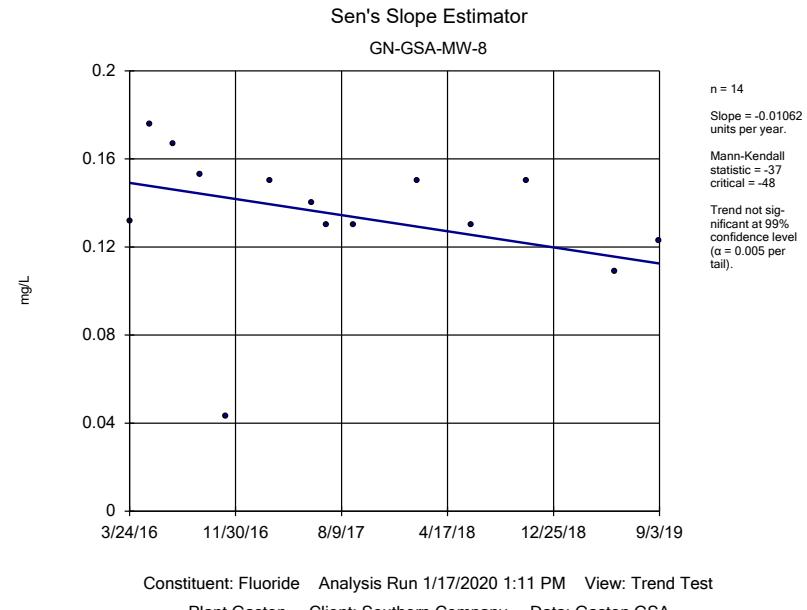
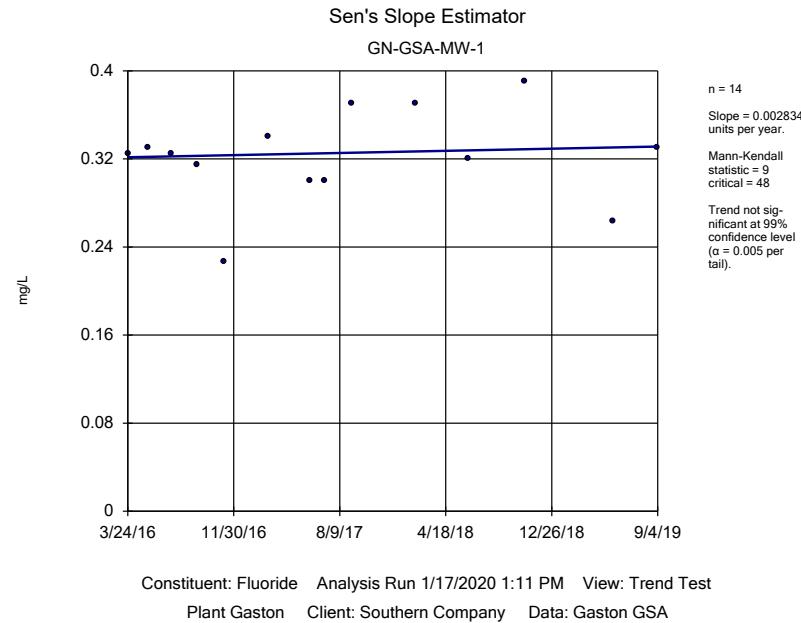


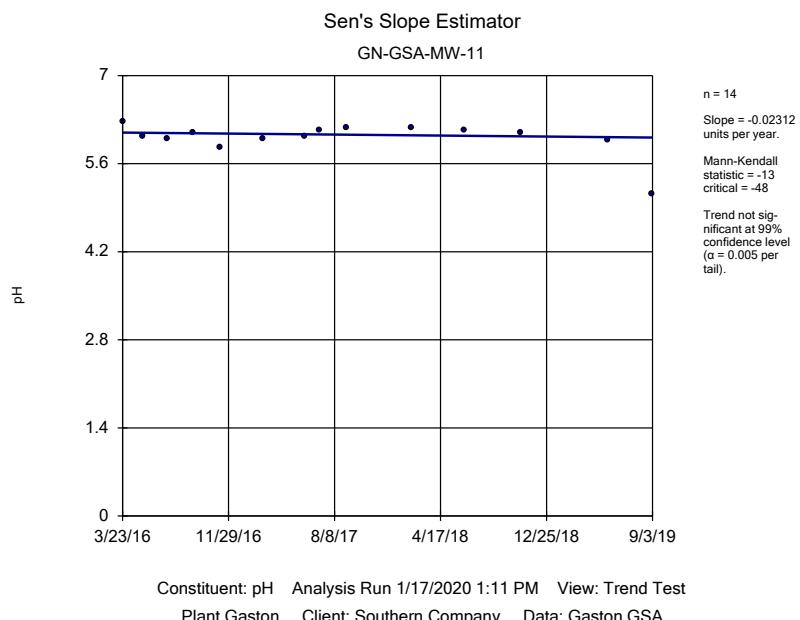
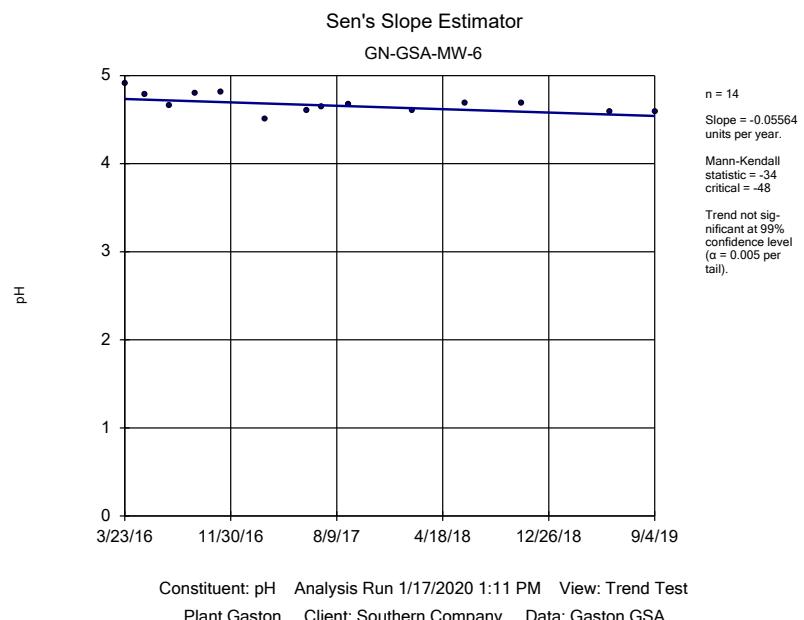
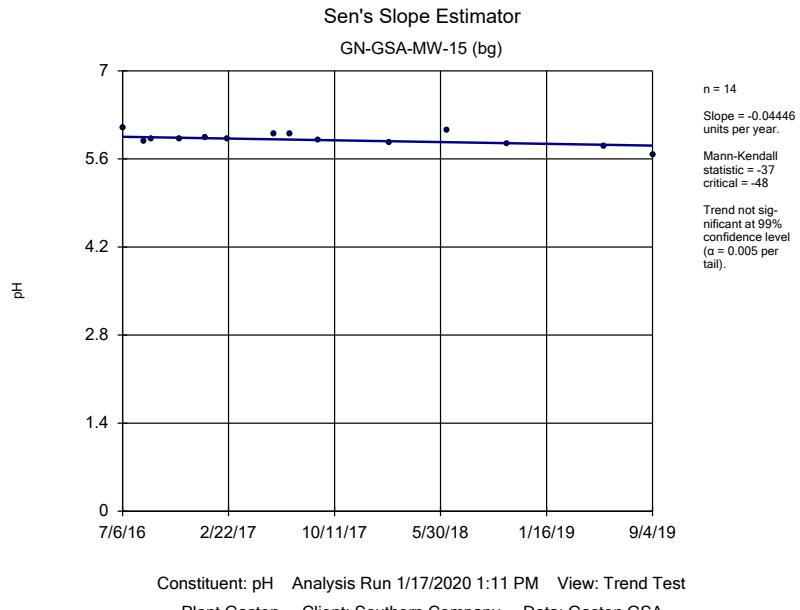
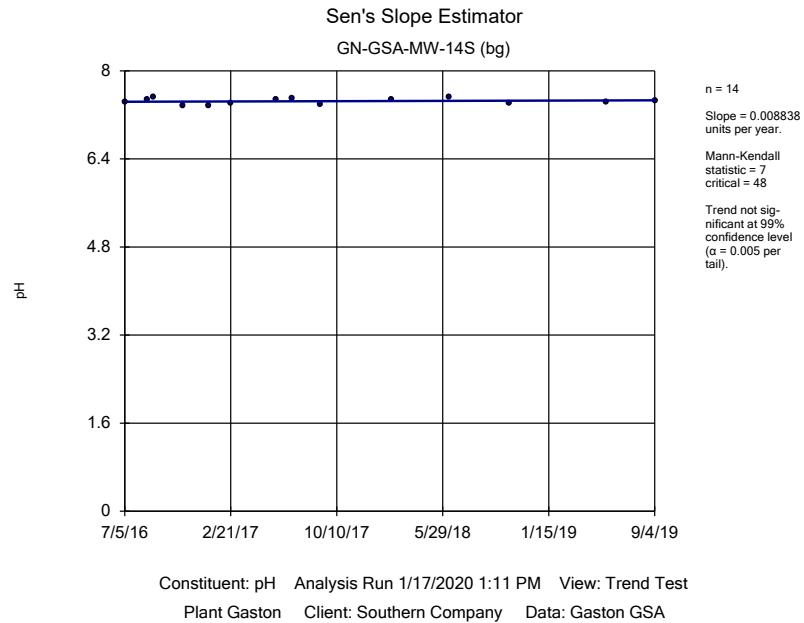
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
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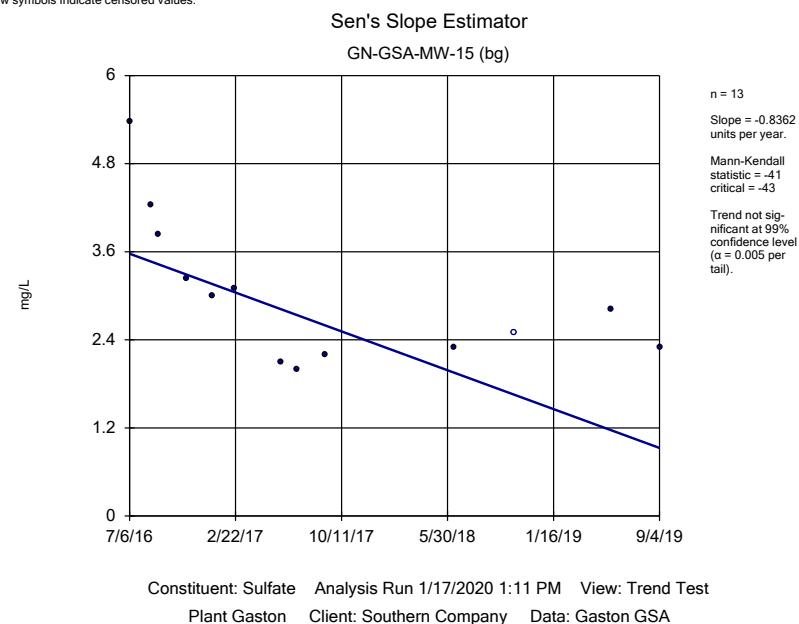
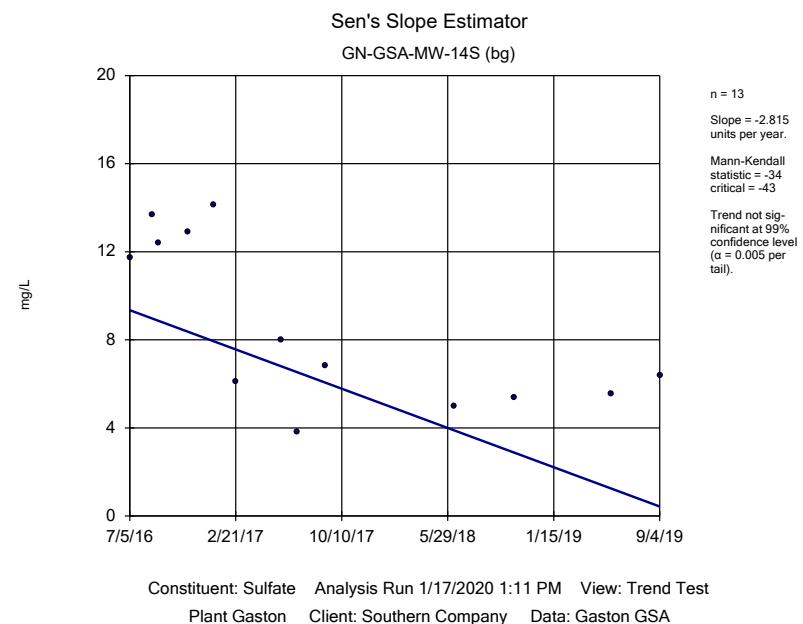
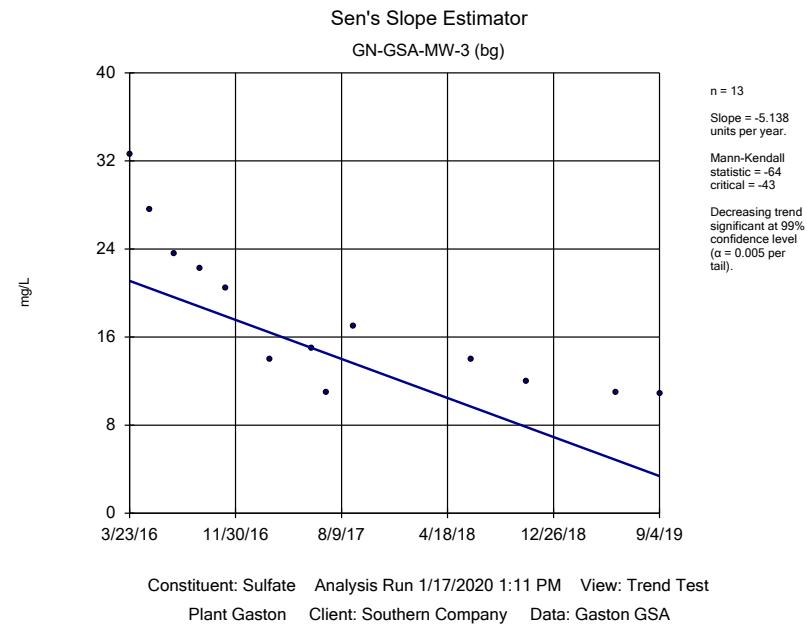
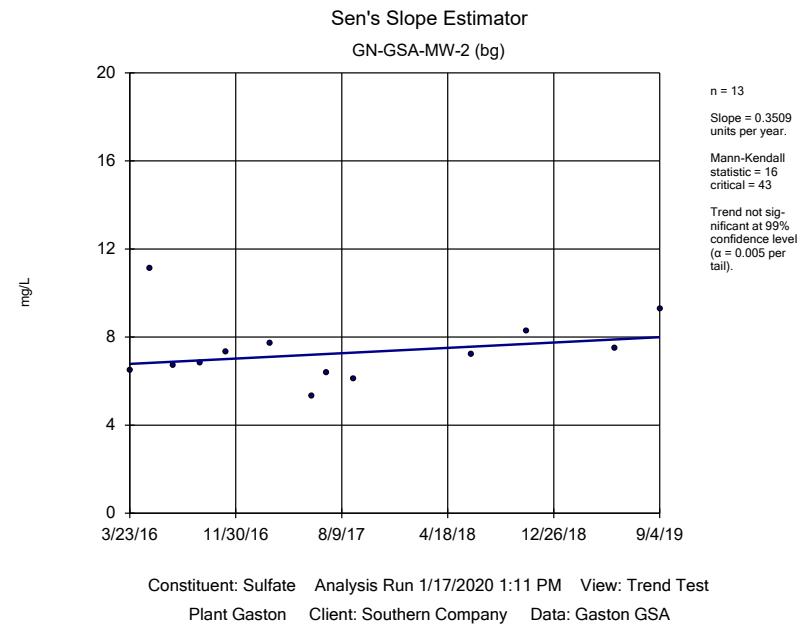


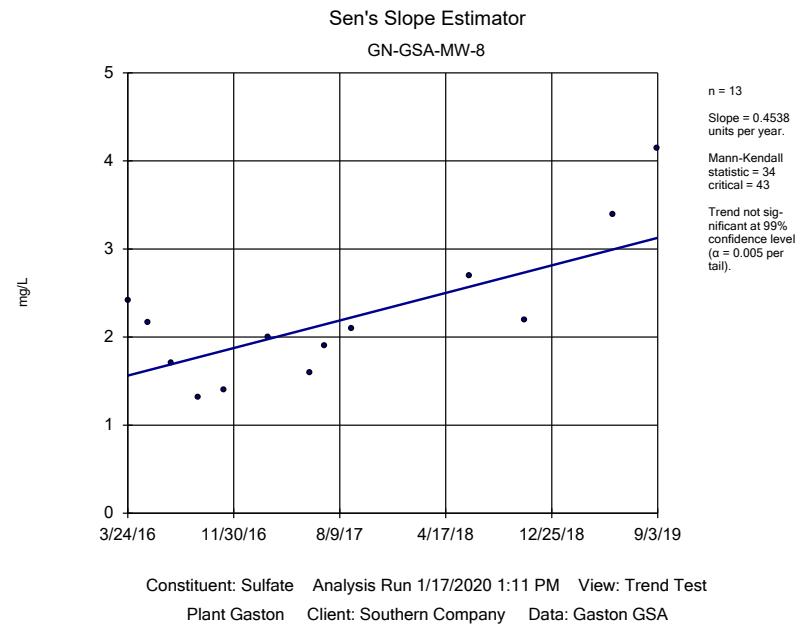
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.





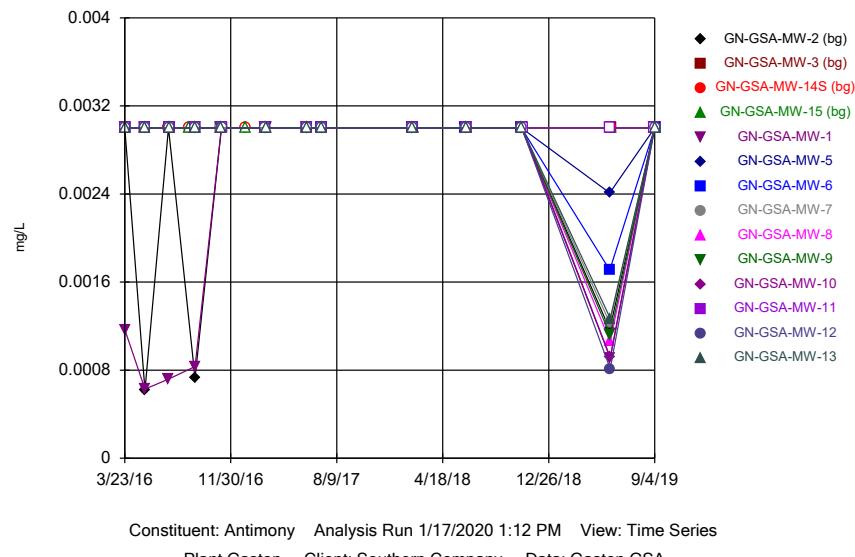






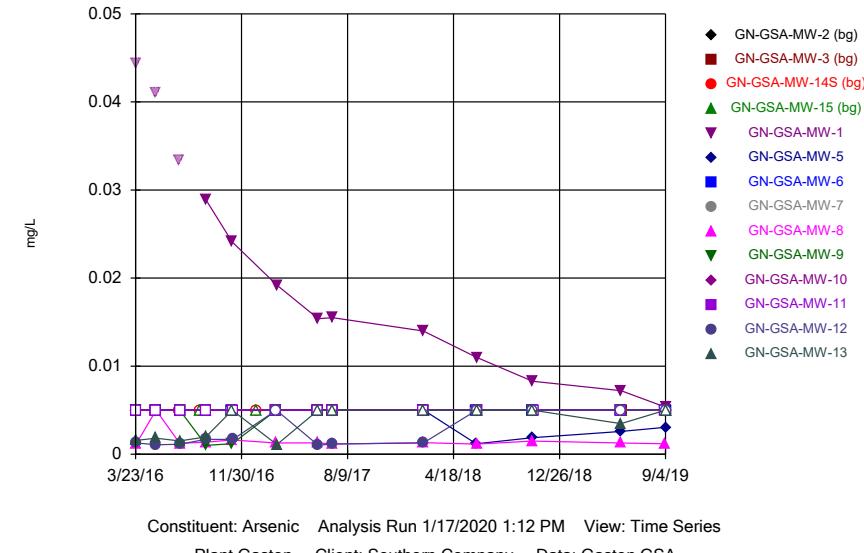
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### Time Series



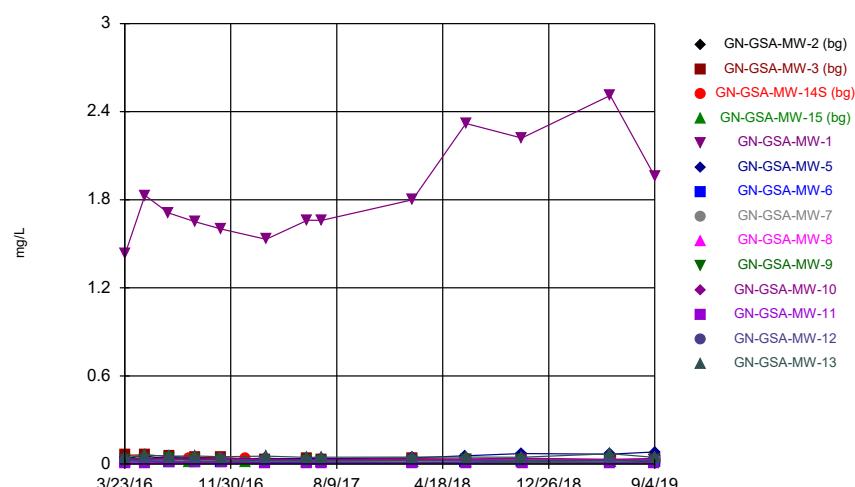
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Hollow symbols indicate censored values.

### Time Series



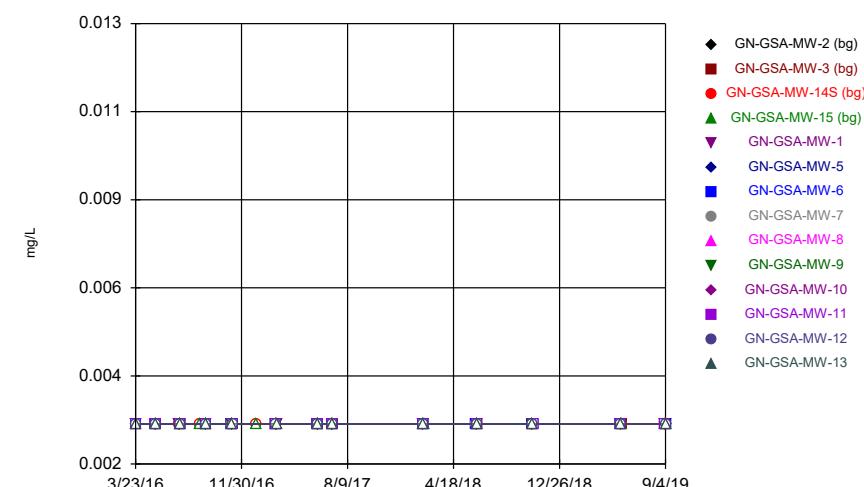
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### Time Series



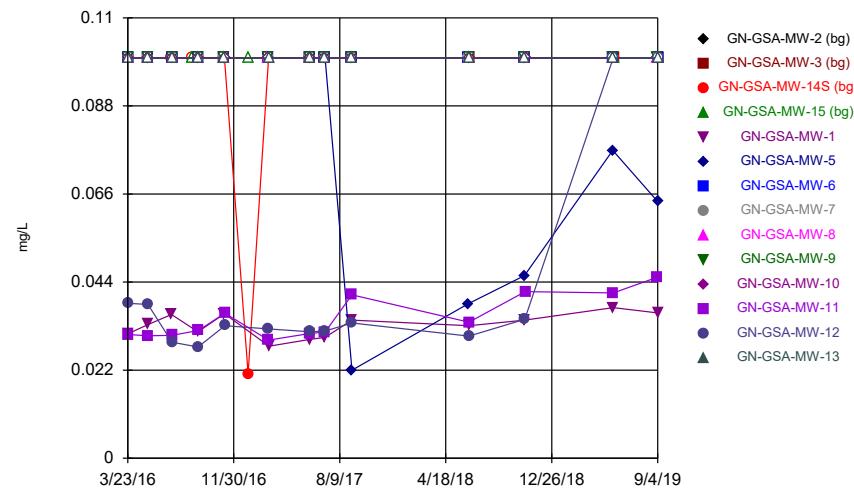
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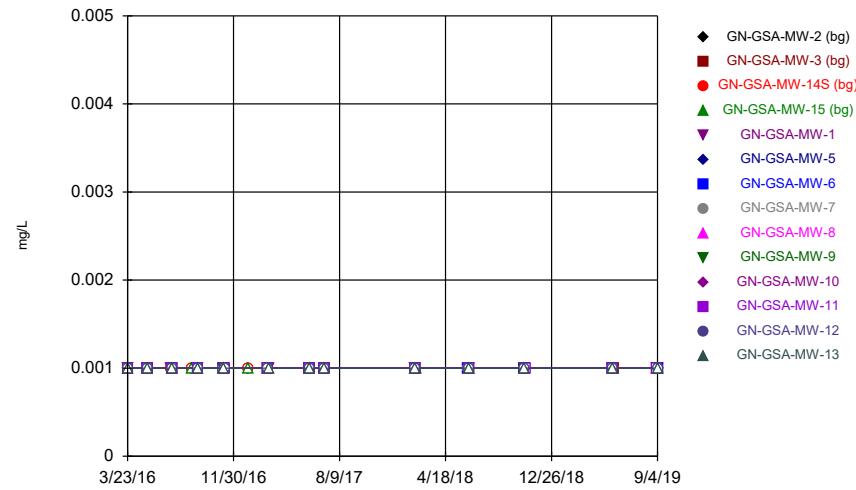
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### Time Series



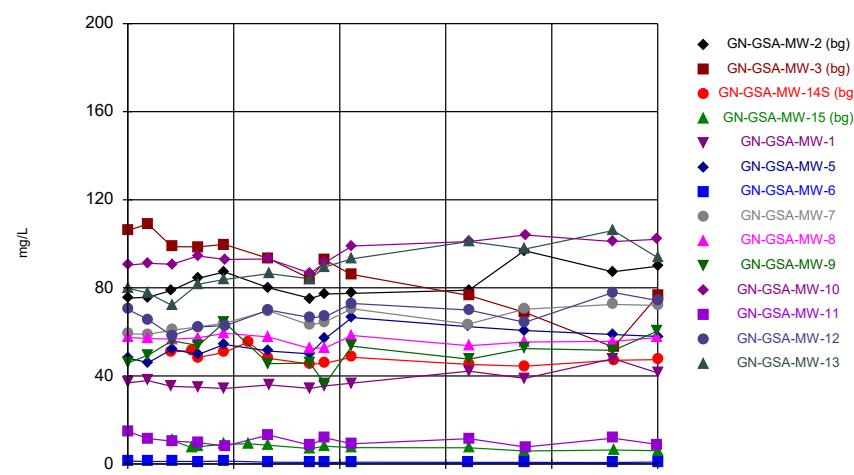
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### Time Series



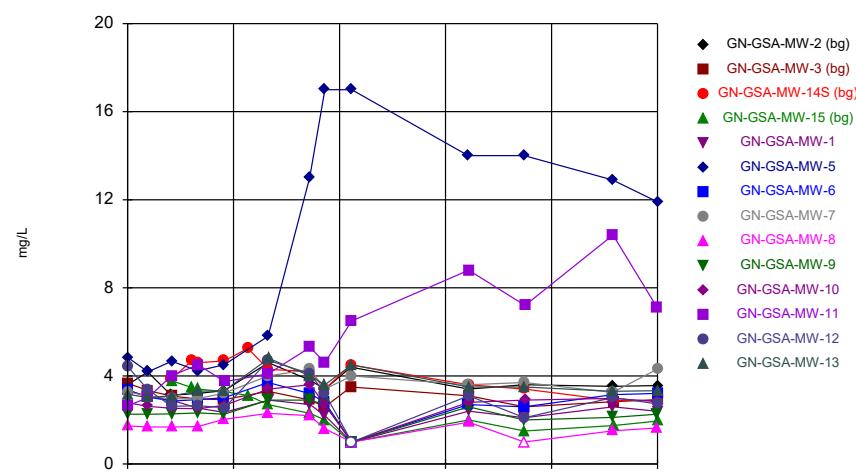
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### Time Series



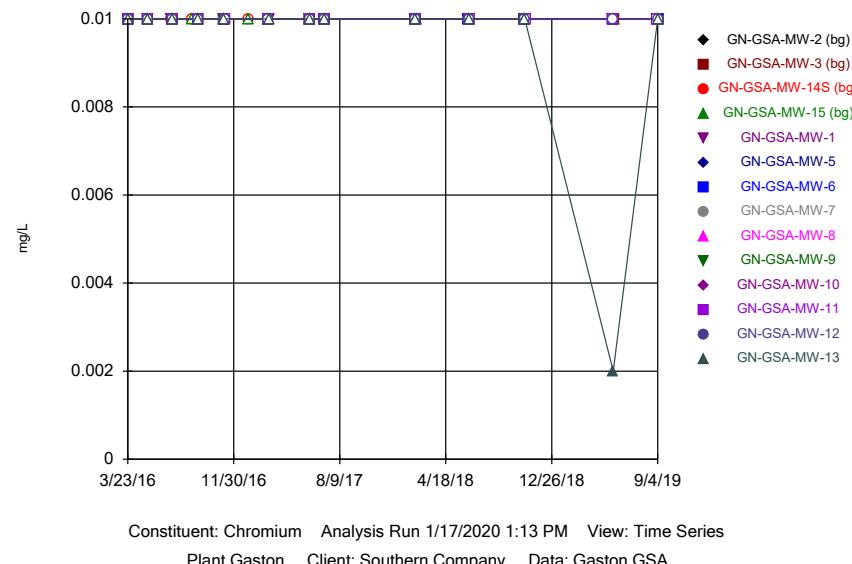
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Hollow symbols indicate censored values.

### Time Series



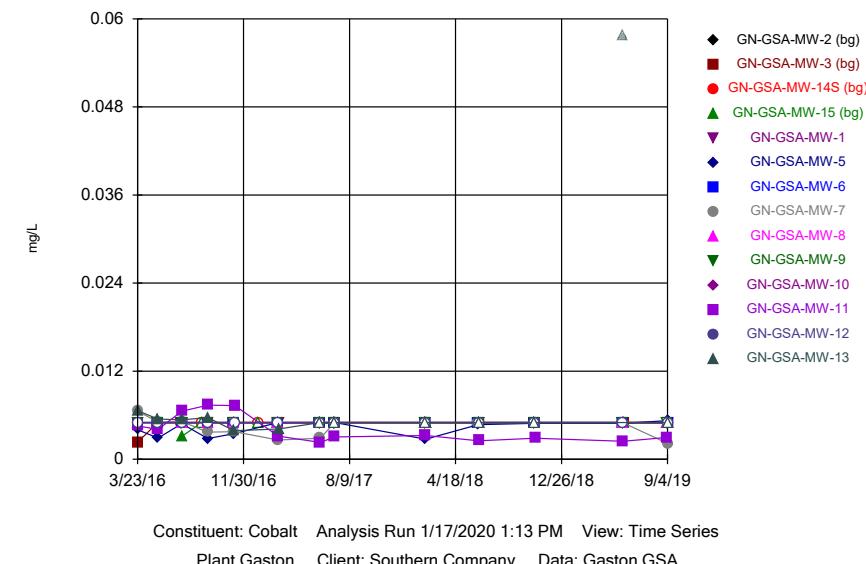
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Hollow symbols indicate censored values.

### Time Series



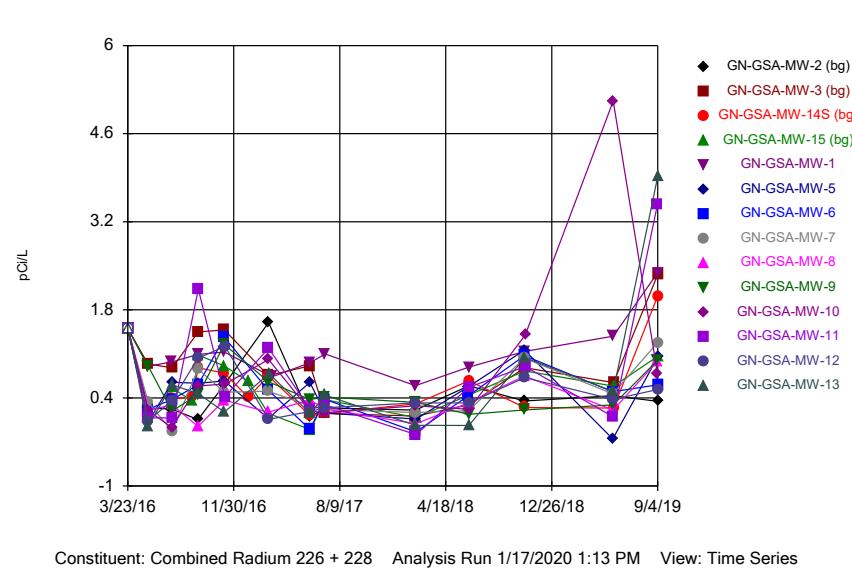
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



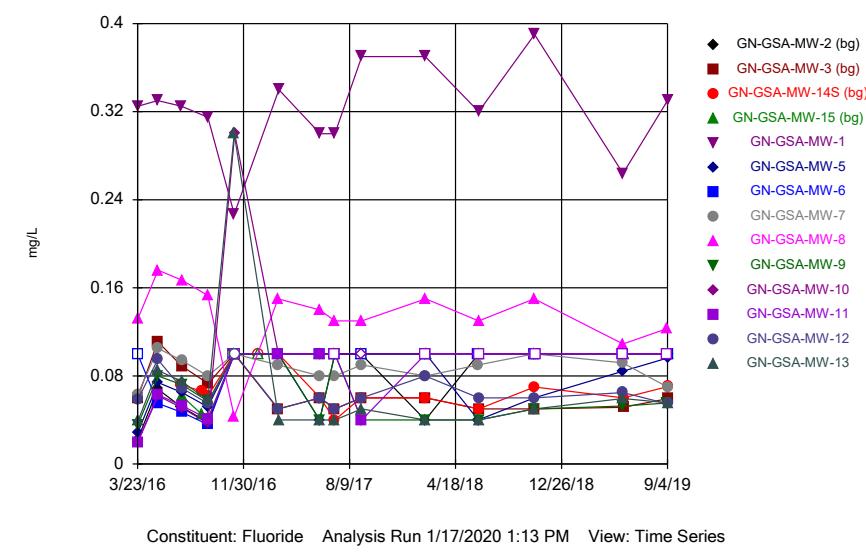
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Hollow symbols indicate censored values.

### Time Series



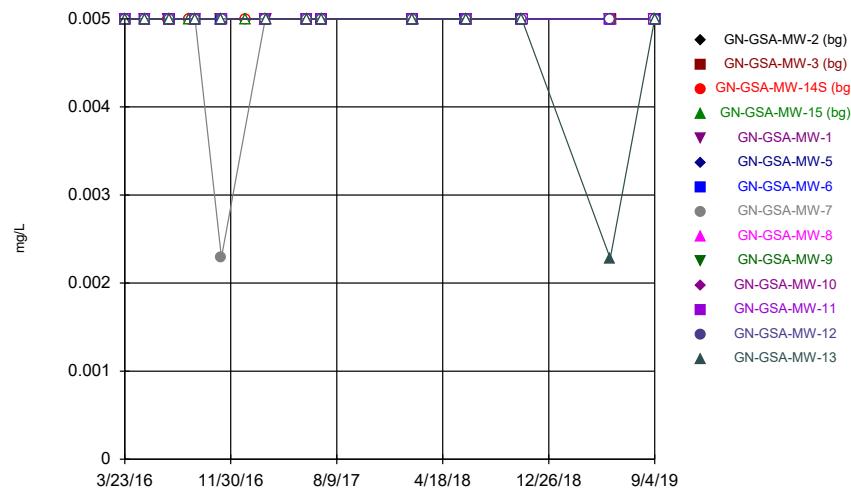
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Hollow symbols indicate censored values.

### Time Series



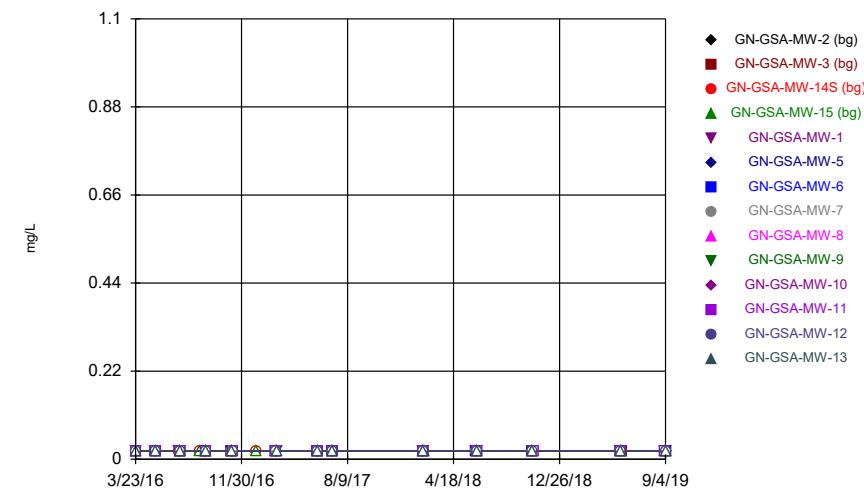
Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series



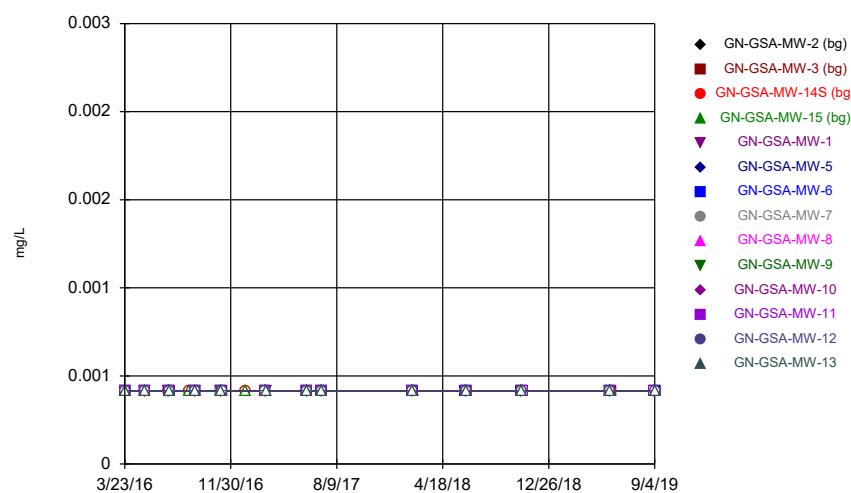
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Hollow symbols indicate censored values.

### Time Series



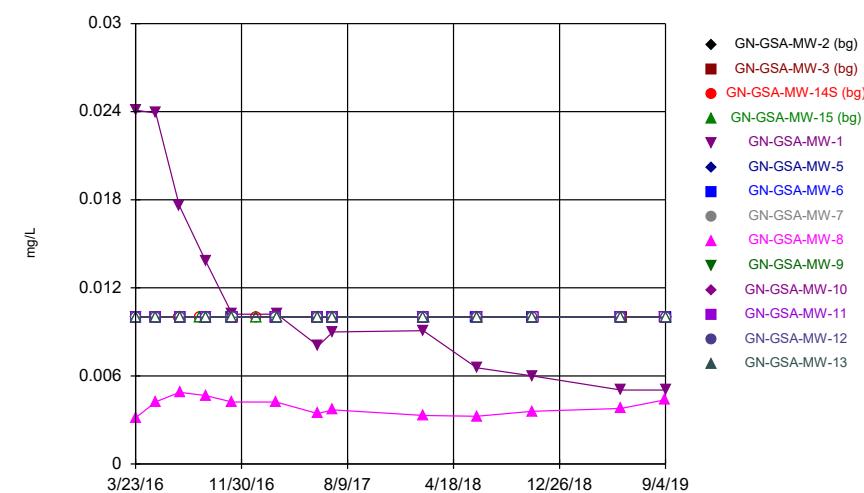
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Hollow symbols indicate censored values.

### Time Series

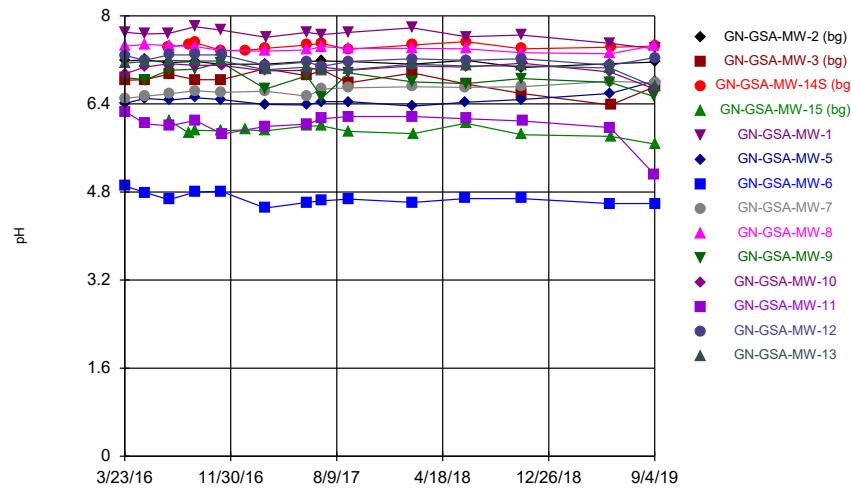


Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company, UG  
Hollow symbols indicate censored values.

### Time Series

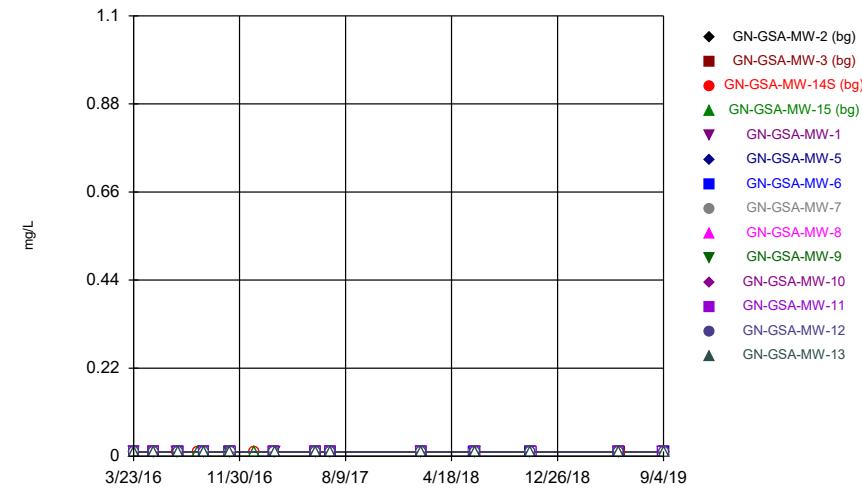


## Time Series



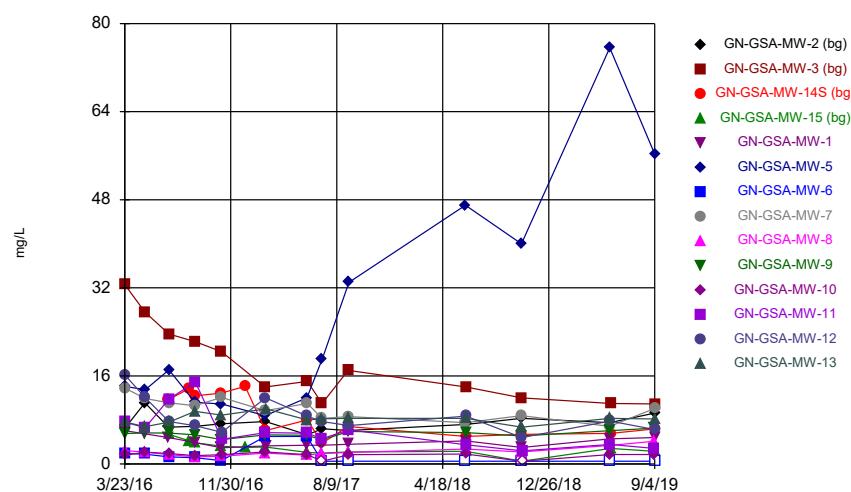
Constituent: pH Analysis Run 1/17/2020 1:13 PM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Time Series



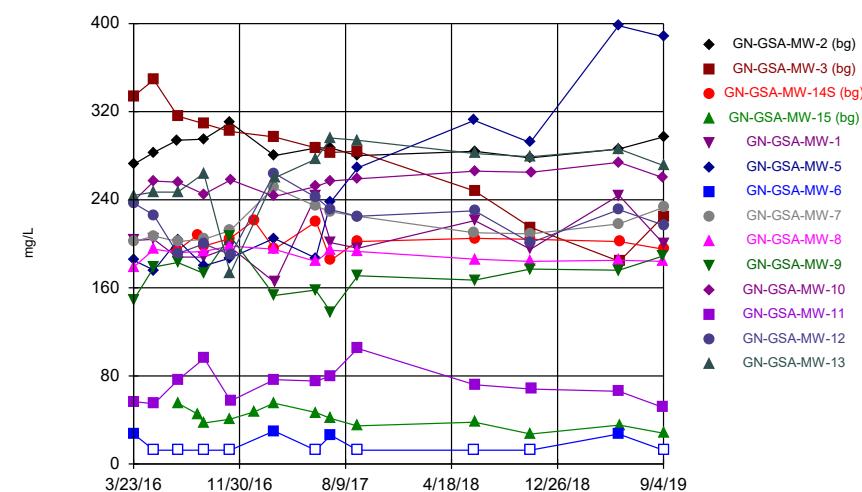
Constituent: Selenium Analysis Run 1/17/2020 1:13 PM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Time Series



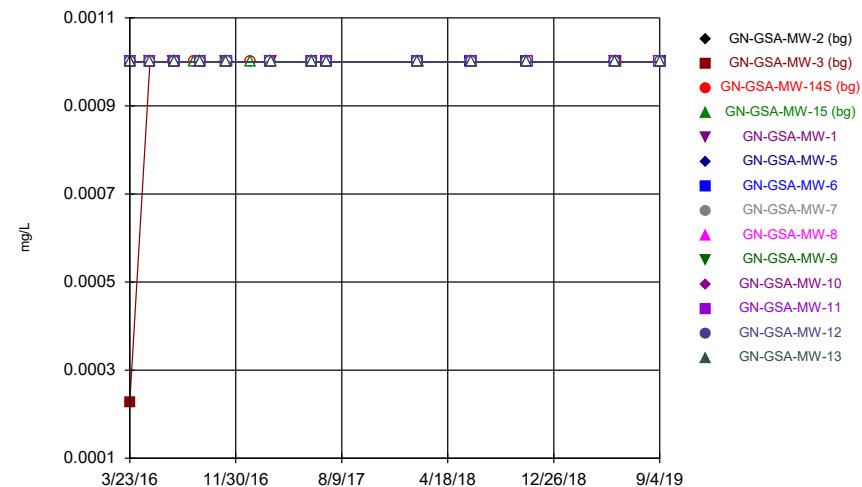
Constituent: Sulfate Analysis Run 1/17/2020 1:13 PM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

## Time Series



Constituent: TDS Analysis Run 1/17/2020 1:13 PM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series

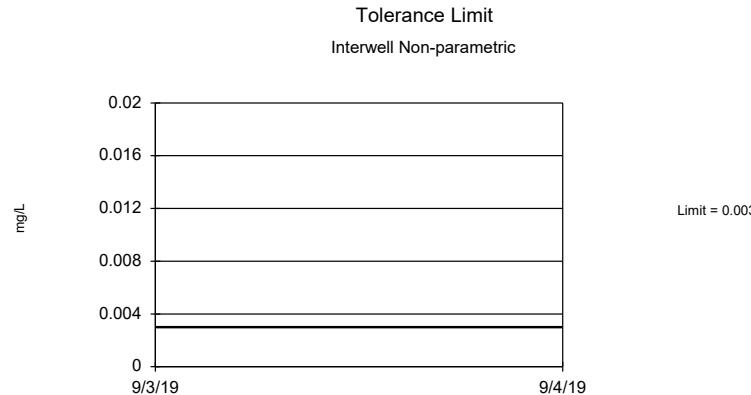


Constituent: Thallium Analysis Run 1/17/2020 1:13 PM View: Time Series  
Plant Gaston Client: Southern Company Data: Gaston GSA

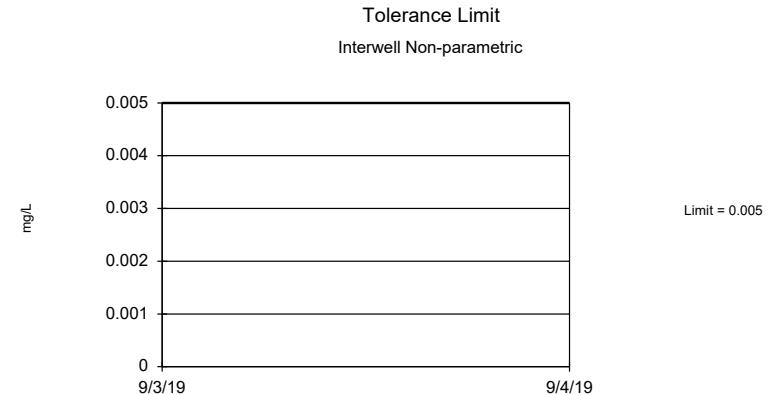
# Upper Tolerance Limits - Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:17 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	n/a	52	n/a	n/a	94.23	n/a	n/a	0.06944	NP Inter(nds)
Arsenic (mg/L)	0.005	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Barium (mg/L)	0.0622	n/a	52	n/a	n/a	0	n/a	n/a	0.06944	NP Inter(normal...)
Beryllium (mg/L)	0.003	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Cadmium (mg/L)	0.001	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Chromium (mg/L)	0.01	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Cobalt (mg/L)	0.005	n/a	52	n/a	n/a	96.15	n/a	n/a	0.06944	NP Inter(nds)
Combined Radium 226 + 228 (pCi/L)	2.36	n/a	52	n/a	n/a	3.846	n/a	n/a	0.06944	NP Inter(normal...)
Fluoride (mg/L)	0.111	n/a	56	n/a	n/a	33.93	n/a	n/a	0.05656	NP Inter(normal...)
Lead (mg/L)	0.005	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Lithium (mg/L)	0.02	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Mercury (mg/L)	0.0005	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Molybdenum (mg/L)	0.01	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Selenium (mg/L)	0.01	n/a	52	n/a	n/a	100	n/a	n/a	0.06944	NP Inter(nds)
Thallium (mg/L)	0.001	n/a	52	n/a	n/a	98.08	n/a	n/a	0.06944	NP Inter(nds)



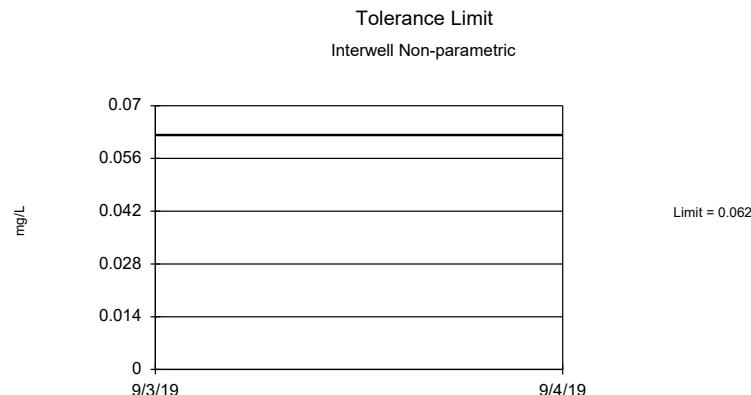
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 52 background values. 94.23% NDs. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.



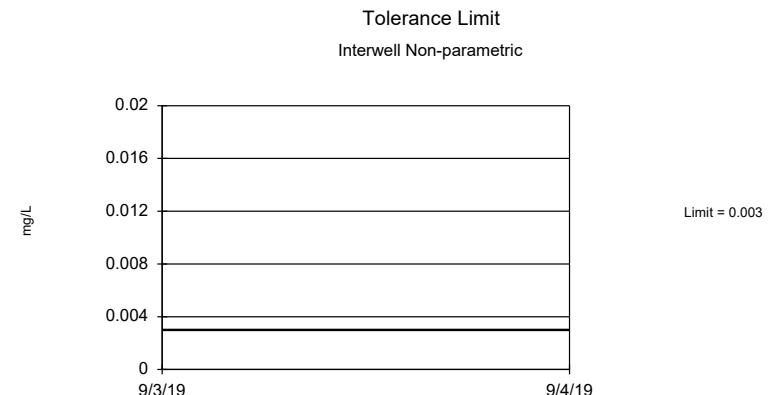
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Antimony Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Arsenic Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



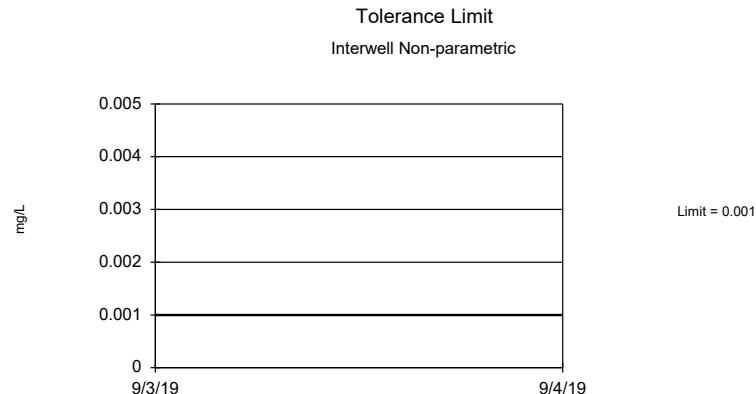
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 52 background values. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

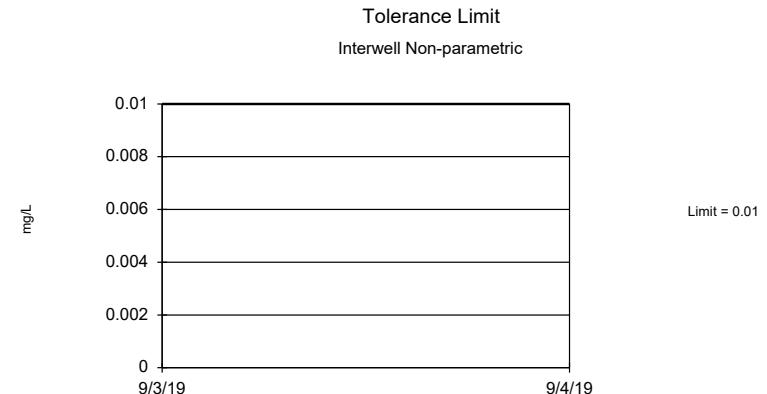
Constituent: Barium Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Beryllium Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



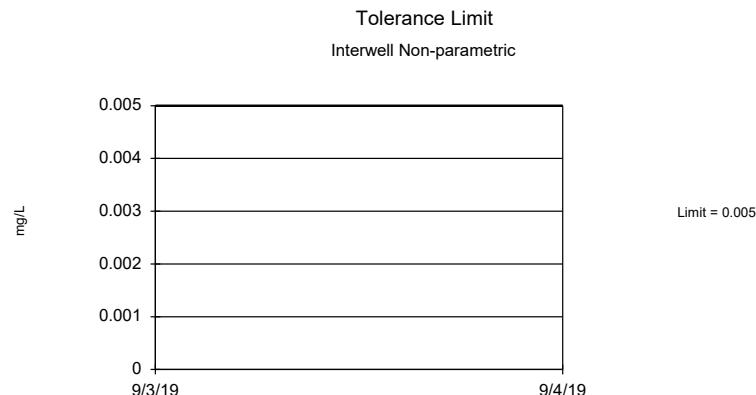
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Cadmium Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



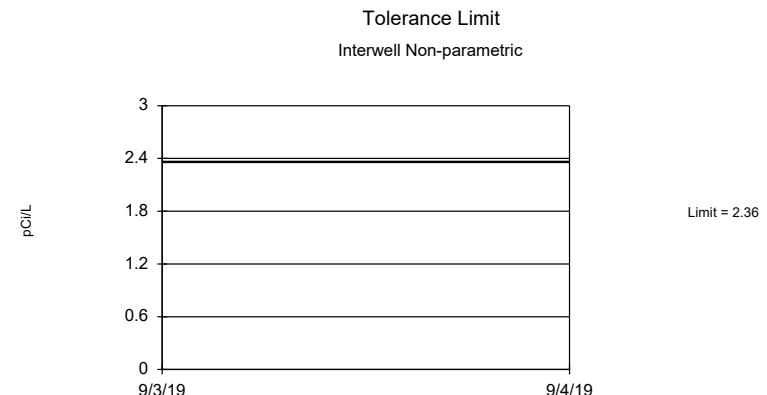
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Chromium Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



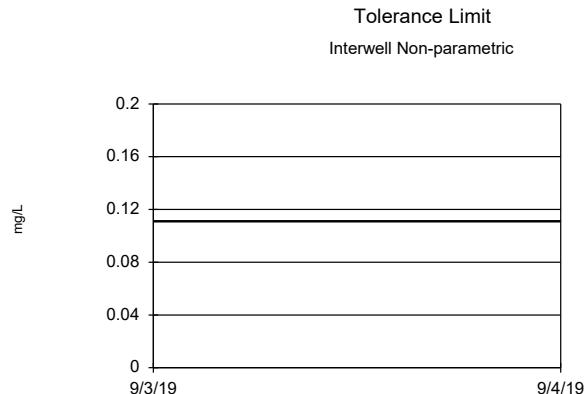
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 52 background values. 96.15% NDs. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Cobalt Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

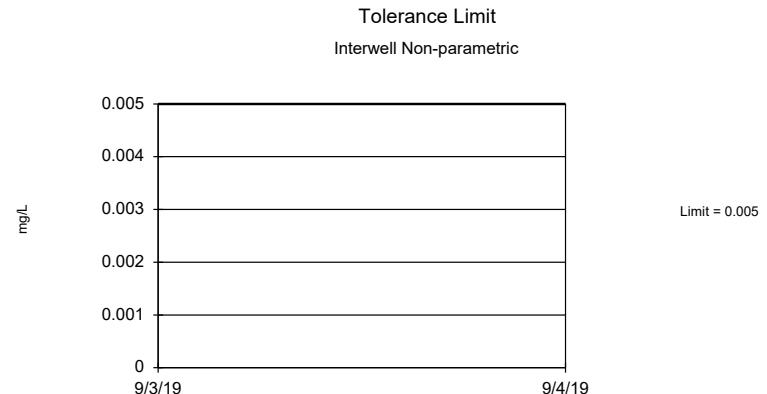


Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 52 background values. 3.846% NDs. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Combined Radium 226 + 228 Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



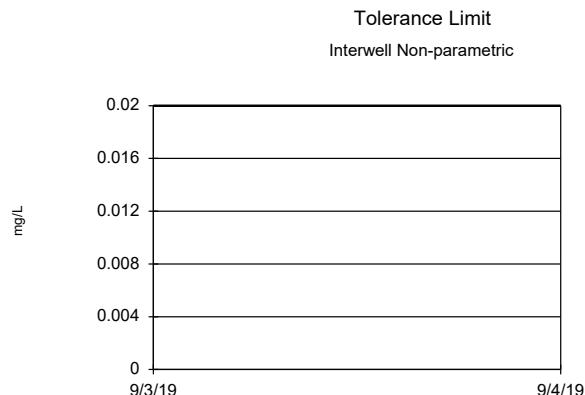
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 56 background values. 33.93% NDs. 91.99% coverage at alpha=0.01; 94.73% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.05656.



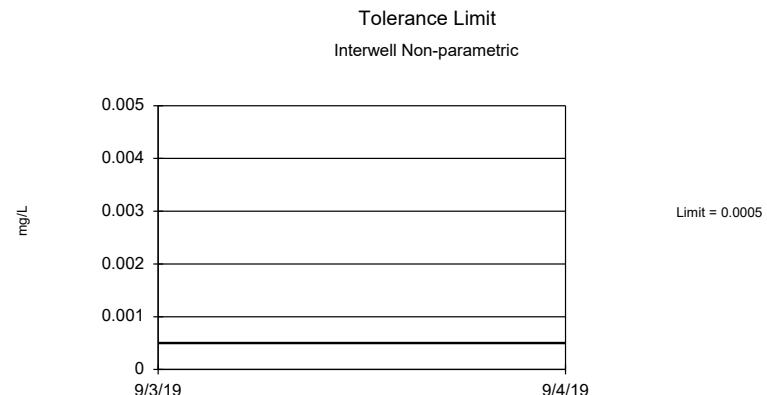
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Fluoride Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Lead Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



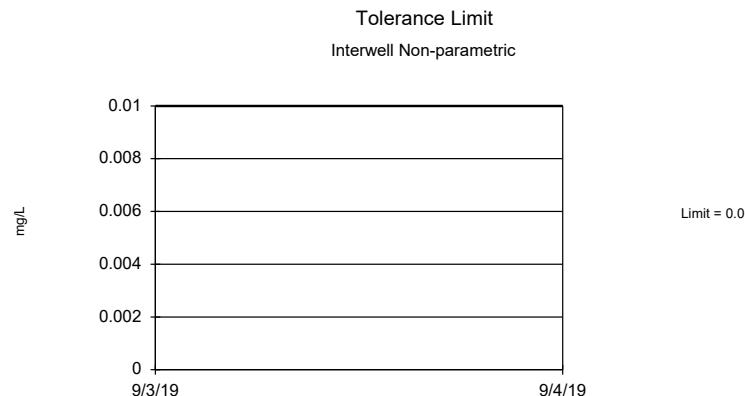
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.



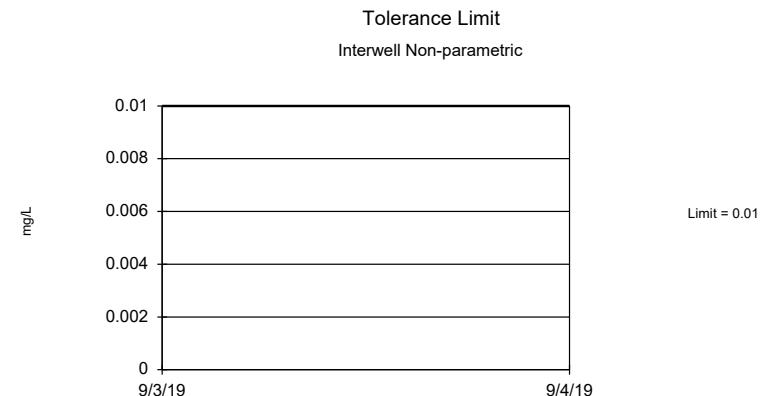
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Lithium Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Mercury Analysis Run 1/17/2020 1:16 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



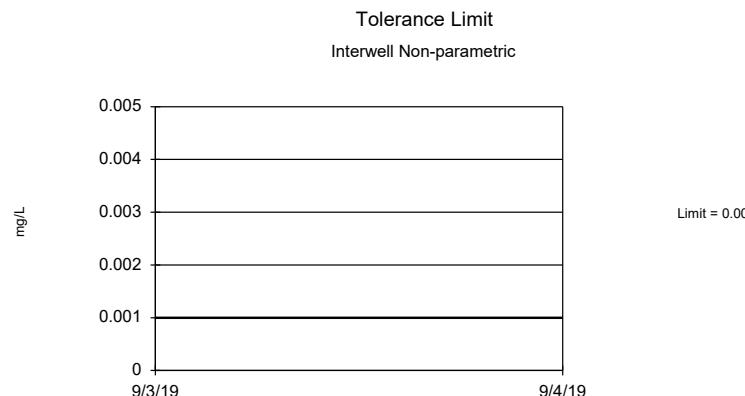
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Molybdenum Analysis Run 1/17/2020 1:17 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Constituent: Selenium Analysis Run 1/17/2020 1:17 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 52 background values. 98.08% NDs. 91.6% coverage at alpha=0.01; 94.34% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.06944.

Constituent: Thallium Analysis Run 1/17/2020 1:17 PM View: UTL's - Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

# Confidence Intervals - All Results (No Significant Results)

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:19 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.003	0.000718	0.006	No	13	61.54	No	0.01	NP (normality)
Antimony (mg/L)	GN-GSA-MW-5	0.003	0.00241	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.003	0.00171	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.003	0.00123	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.003	0.00106	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.003	0.00112	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.003	0.000916	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-11	0.003	0.003	0.006	No	13	100	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.003	0.000813	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.003	0.00127	0.006	No	13	92.31	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.02161	0.00818	0.01	No	10	0	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-5	0.005	0.00188	0.01	No	13	69.23	No	0.01	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-6	0.005	0.005	0.01	No	13	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.005	0.005	0.01	No	13	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-8	0.00162	0.00115	0.01	No	13	7.692	No	0.01	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-9	0.005	0.00121	0.01	No	13	84.62	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-10	0.005	0.005	0.01	No	13	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.005	0.005	0.01	No	13	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-12	0.005	0.00107	0.01	No	13	38.46	No	0.01	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-13	0.005	0.00152	0.01	No	13	53.85	No	0.01	NP (normality)
Barium (mg/L)	GN-GSA-MW-1	2.08	1.594	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-5	0.0711	0.0337	2	No	13	0	No	0.01	NP (normality)
Barium (mg/L)	GN-GSA-MW-6	0.01669	0.01439	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-7	0.02226	0.01868	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-8	0.03119	0.02629	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-9	0.02932	0.02348	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-10	0.03673	0.03293	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.00841	0.005993	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-12	0.02292	0.01948	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.0609	0.0452	2	No	13	0	No	0.01	NP (normality)
Beryllium (mg/L)	GN-GSA-MW-1	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-5	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-6	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-7	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-8	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-9	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-10	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-11	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-12	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-13	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-1	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-5	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-6	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-7	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-8	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-9	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-10	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-11	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-12	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-13	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-5	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-9	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-12	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.01	0.002	0.1	No	13	92.31	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-1	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.005	0.00281	0.006	No	13	23.08	No	0.01	NP (Cohens/xfrm)
Cobalt (mg/L)	GN-GSA-MW-6	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-7	0.006235	0.003586	0.006	No	13	38.46	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-8	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-9	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-10	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.005034	0.002719	0.006	No	13	0	In(x)	0.01	Param.

# Confidence Intervals - All Results (No Significant Results)

Page 2

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:19 PM

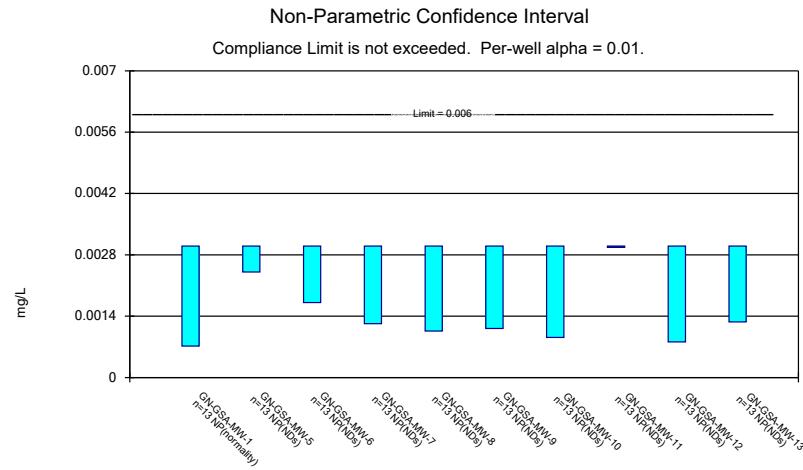
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	GN-GSA-MW-12	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-13	0.005645	0.004548	0.006	No	12	50	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.422	0.8259	5	No	13	7.692	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	0.9125	0.1561	5	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	0.9309	0.1977	5	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.908	0.1972	5	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.983	-0.011	5	No	13	7.692	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	0.9177	0.2681	5	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	1.489	0.07407	5	No	13	7.692	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.411	0.04339	5	No	13	7.692	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	0.8716	0.1906	5	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	1.18	0.00379	5	No	13	7.692	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-1	0.3517	0.292	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-5	0.1	0.04	4	No	14	28.57	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-6	0.1	0.055	4	No	14	64.29	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-7	0.09509	0.07832	4	No	14	7.143	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1551	0.1183	4	No	14	0	x^2	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.07524	0.0439	4	No	14	14.29	ln(x)	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-10	0.3	0.051	4	No	14	50	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-11	0.1	0.041	4	No	14	50	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-12	0.08	0.0547	4	No	14	7.143	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.075	0.04	4	No	14	0	No	0.01	NP (normality)
Lead (mg/L)	GN-GSA-MW-1	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-5	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-7	0.005	0.00229	0.015	No	13	92.31	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-8	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-9	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-10	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-11	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-12	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.005	0.00228	0.015	No	13	92.31	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-5	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-6	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-7	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-8	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-9	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-10	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-11	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-12	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-13	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-5	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-6	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-7	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-8	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-9	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-10	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-11	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-12	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-13	0.02	0.02	0.04	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-1	0.01555	0.006692	0.1	No	13	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-5	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-6	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-7	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-8	0.004327	0.003494	0.1	No	13	0	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-10	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-11	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-12	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-13	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-1	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-5	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-6	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-7	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-8	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-9	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)

# Confidence Intervals - All Results (No Significant Results)

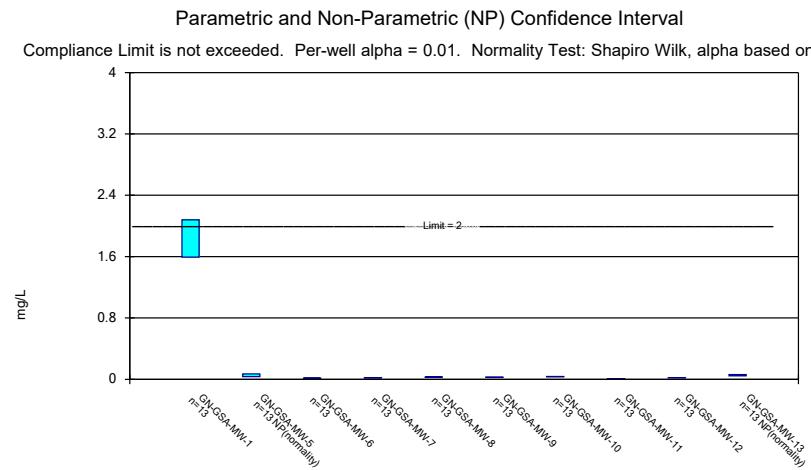
Page 3

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/17/2020, 1:19 PM

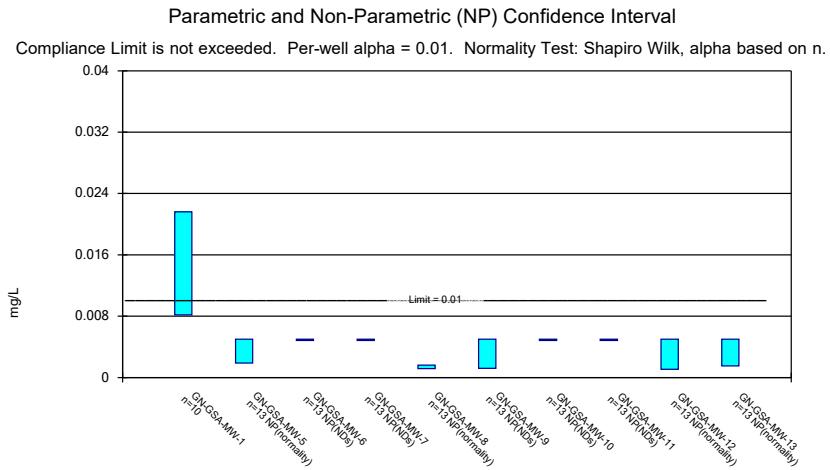
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Selenium (mg/L)	GN-GSA-MW-10	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-11	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-12	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-13	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-1	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-5	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-6	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-7	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-8	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-9	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-10	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-11	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-12	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-13	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)



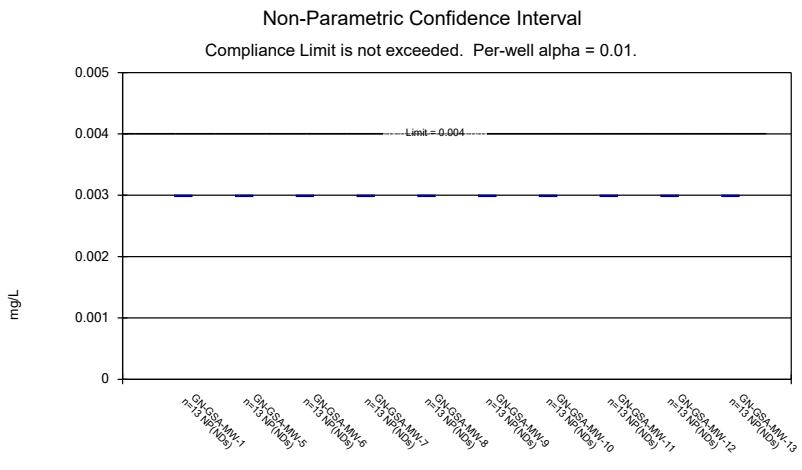
Constituent: Antimony Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



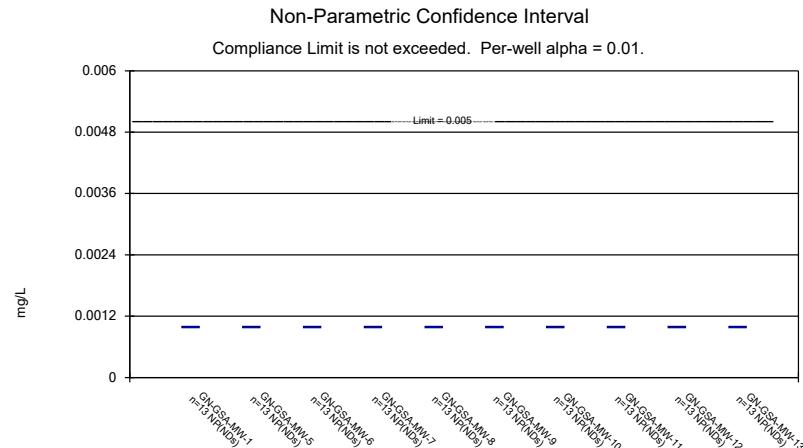
Constituent: Barium Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



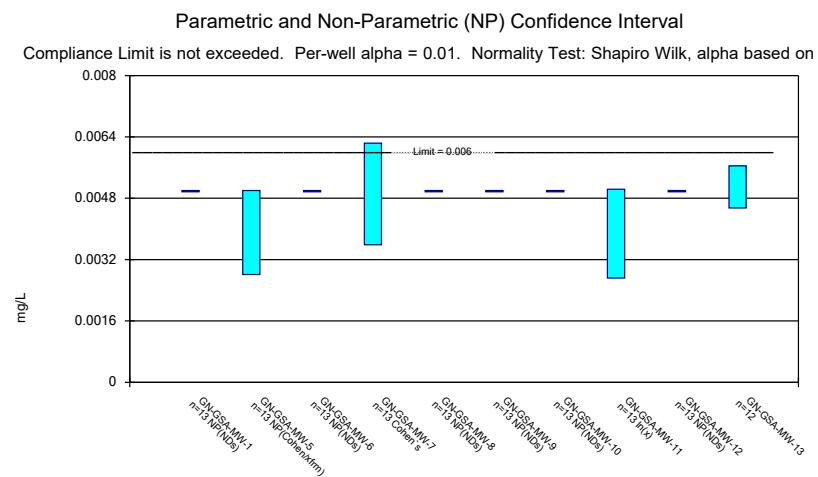
Constituent: Arsenic Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



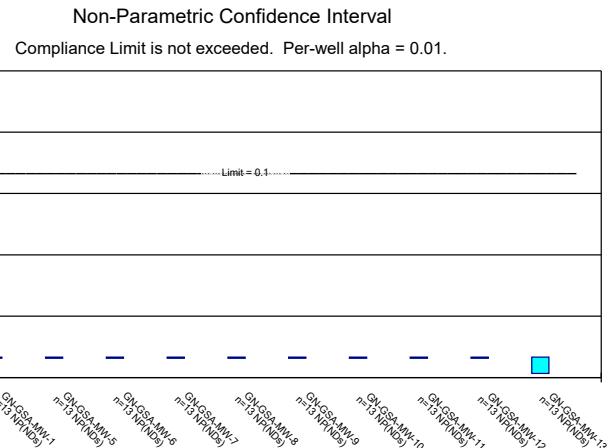
Constituent: Beryllium Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



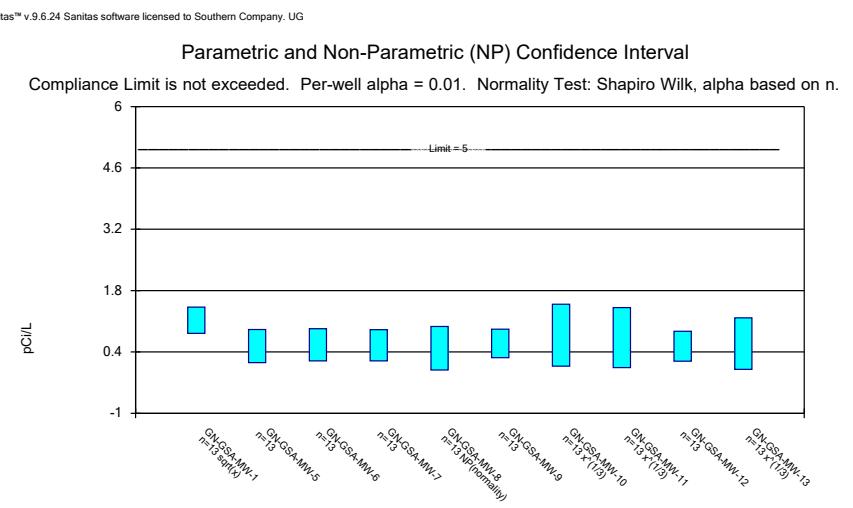
Constituent: Cadmium Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



Constituent: Cobalt Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



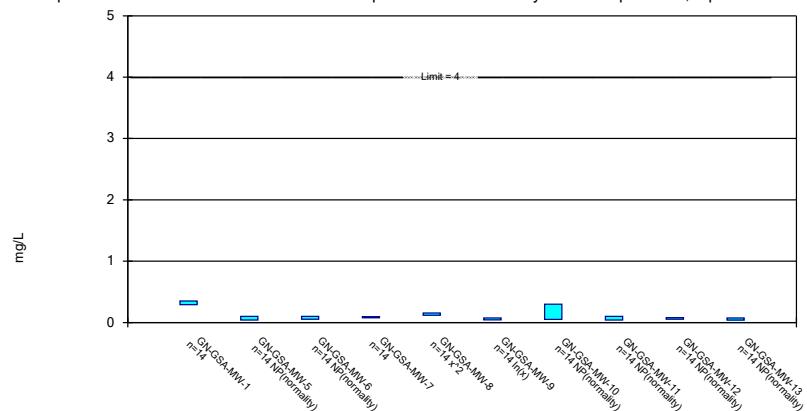
Constituent: Chromium Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



Constituent: Combined Radium 226 + 228 Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals -  
Plant Gaston Client: Southern Company Data: Gaston GSA

### 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.

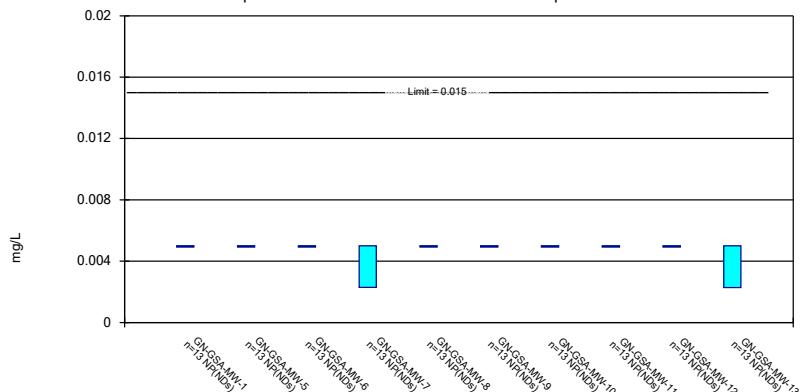


Constituent: Fluoride Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV

Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

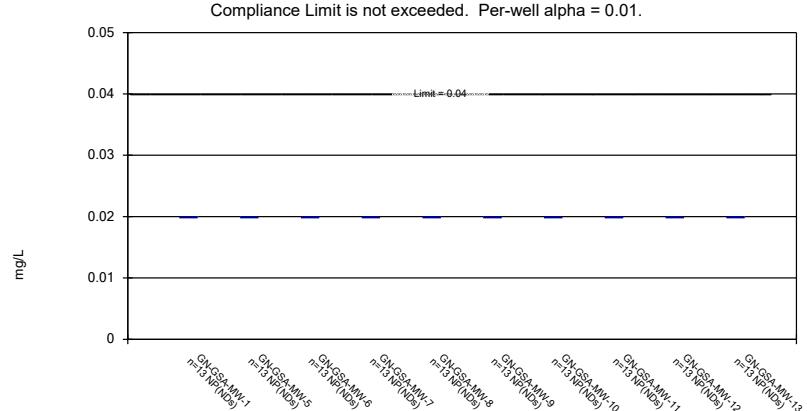


Constituent: Lead Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV

Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

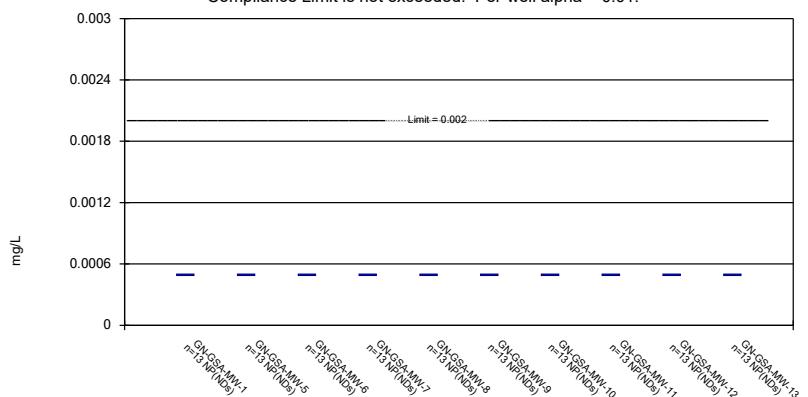


Constituent: Lithium Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV

Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

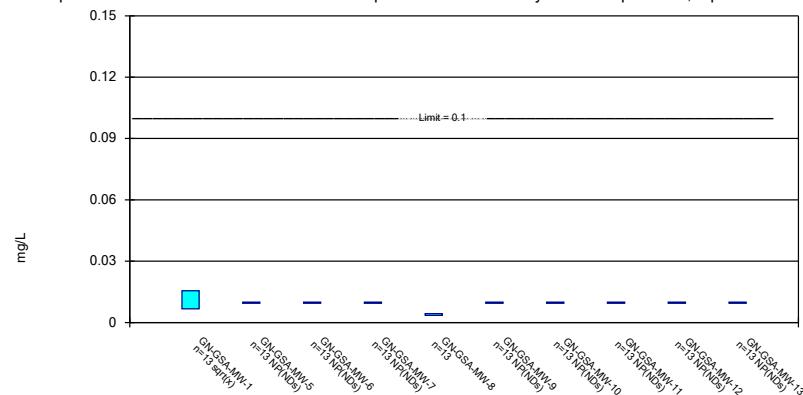


Constituent: Mercury Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV

Plant Gaston Client: Southern Company Data: Gaston GSA

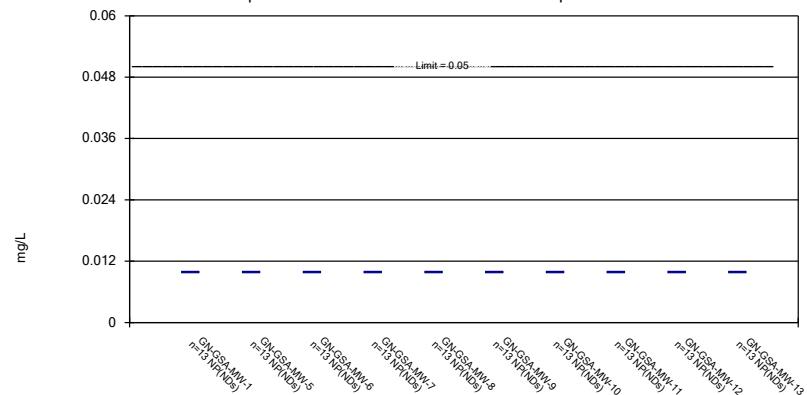
### Parametric and Non-Parametric (NP) Confidence Interval

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.

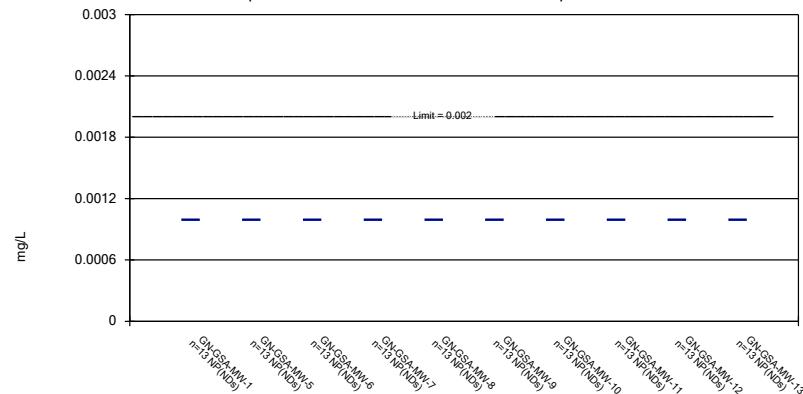


Constituent: Molybdenum Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

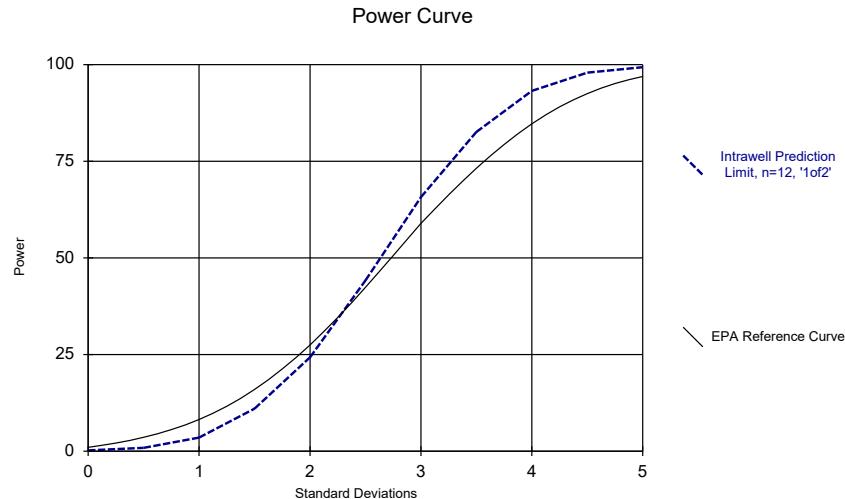
Constituent: Selenium Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

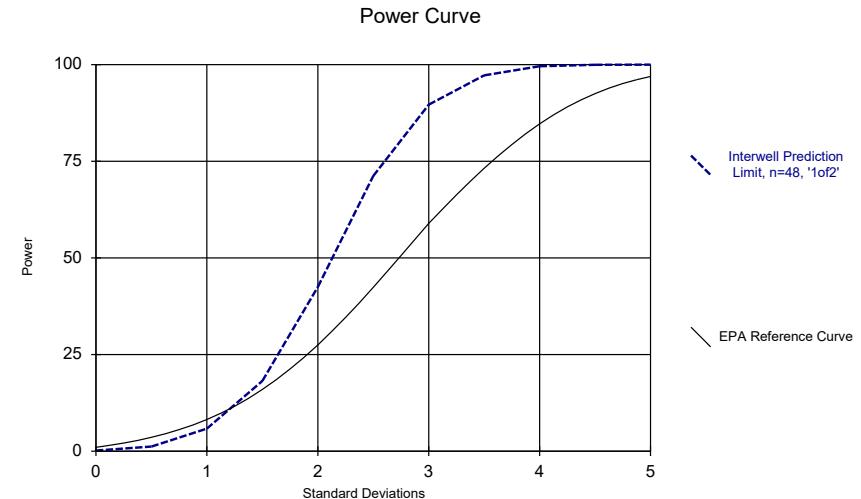


Constituent: Thallium Analysis Run 1/17/2020 1:18 PM View: Confidence Intervals - App IV  
Plant Gaston Client: Southern Company Data: Gaston GSA



Kappa = 2.599, based on 10 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 1/30/2020 10:29 AM View: Power Curves  
Plant Gaston Client: Southern Company Data: Gaston GSA



Kappa = 2.039, based on 10 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 1/30/2020 10:29 AM View: Power Curves  
Plant Gaston Client: Southern Company Data: Gaston GSA