

**2022 ANNUAL GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT**

**ALABAMA POWER COMPANY  
PLANT GASTON  
GYPSUM POND**

**January 31, 2023**

Prepared for

Alabama Power Company  
Birmingham, Alabama

By

Southern Company Services  
Earth Science and Environmental Engineering



**CERTIFICATION STATEMENT**

This 2022 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.

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## **EXECUTIVE SUMMARY**

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D) and the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, this 2022 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 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 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 the Appendix IV parameter, barium, was identified during the first and second semi-annual groundwater monitoring events of 2022 in well GN-GSA-MW-1. The following summarizes results and activities conducted during the 2022 monitoring period:

- Submitted the 2021 Annual Groundwater Monitoring and Corrective Action Report to the Department on January 31, 2022.
- Performed an Alternate Source Demonstration (ASD) for the Appendix IV parameter, barium, at well GN-GSA-MW-1 and submitted the report to the Department in June 2022.
- Completed the first semi-annual assessment groundwater monitoring event between April 11, 2022, and April 13, 2022.
- Submitted the first 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report to the Department on July 31, 2022.
- Completed the second 2022 semi-annual assessment groundwater monitoring event between August 16, 2022, and August 18, 2022.
- Installed multi-parameter groundwater monitoring instrumentation at select well locations from October to December 2022 as a tool for evaluating groundwater elevation fluctuations and field parameters in-between sampling events.

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

- Perform the first 2023 semi-annual assessment monitoring event in the spring of 2023 and submit the Semi-Annual Groundwater Monitoring and Corrective Action Report of 2023 to the Department by July 31, 2023.

If the ASD is not approved by the Department, the facility will move into an assessment of corrective measures (ACM) in accordance with the requirements of § 257.96 and ADEM Admin. Code r. 335-13-15-.06(7).

An **Executive Summary Table** highlighting program status and significant findings from the most recent annual monitoring period has been included on the next page.

**Executive Summary Table  
Monitoring Period Summary  
Plant Gaston Gypsum Storage Area**

Assessment Monitoring Initiated: January 15, 2018  
 Monitoring Period: January 1 - December 31, 2022  
 Beginning Status: Assessment  
 Ending Status: Assessment

**Statistical Analysis Results \***

**Appendix III SSIs**

Parameter	Wells
Boron	NA
Calcium	GN-GSA-MW-1, GN-GSA-MW-2, GN-GSA-MW-5, GN-GSA-MW-7, GN-GSA-MW-9, GN-GSA-MW-10, and GN-GSA-MW-12.
Chloride	GN-GSA-MW-11
Fluoride	GN-GSA-MW-1
pH	GN-GSA-MW-6
Sulfate	GN-GSA-MW-5 and GN-GSA-MW-8
TDS	GN-GSA-MW-5

**Appendix IV SSLs**

Barium: GN-GSA-MW-1

\* See the attached report for further details regarding statistical exceedances and alternate source demonstrations.

**Alternate Source Demonstrations**

An Alternate Source Demonstration (ASD) for barium was pursued to demonstrate that the Gypsum Pond is not the source of barium in well GN-GSA-MW-1. The report was submitted to the Department on June 6, 2022. If the ASD is not approved by the Department, the facility will move into an assessment of corrective measures (ACM) in accordance with the requirements of § 257.96, ADEM Admin. Code r. 335-13-15-.06(7).

**Assessment of Corrective Measures & Groundwater Remedy**

**Assessment of Corrective Measures**

Site Remains in Assessment Monitoring (§ 257.95(d) & Alabama Admin. Code r. 335-13-15-.06(6)(d))

**Groundwater Remedy**

Site Remains in Assessment Monitoring (§ 257.95(d) & Alabama Admin. Code r. 335-13-15-.06(6)(d))

**TABLE OF CONTENTS**

EXECUTIVE SUMMARY ..... i

1.0 Introduction..... 1

2.0 Monitoring Program Status..... 2

3.0 Site Location and Description..... 3

    3.1 Physical Setting..... 3

    3.2 Site Geology and Hydrogeology..... 3

        3.2.1 Uppermost Aquifer ..... 5

        3.2.2 Flow Interpretation..... 5

    3.3 Groundwater Monitoring System..... 6

        3.3.1 Monitoring Wells ..... 6

            3.3.1.1 Upgradient Wells ..... 6

            3.3.1.2 Downgradient Wells ..... 6

            3.3.1.3 Piezometers ..... 7

            3.3.1.4 Monitoring Well Replacement and Abandonment..... 7

    3.4 Groundwater Monitoring History ..... 7

        3.4.1 Available Monitoring Data ..... 8

        3.4.2 Historical Groundwater Flow..... 8

        3.4.3 Monitoring Variance ..... 8

    3.5 Groundwater Sampling and Analysis ..... 8

        3.5.1 Groundwater Sample Collection..... 9

        3.5.2 Sample Preservation and Handling ..... 9

        3.5.3 Chain of Custody ..... 10

        3.5.4 Laboratory Analysis..... 10

        3.5.5 Monitoring Period Sampling Events..... 10

4.0 Groundwater Elevations and Flow..... 11

    4.1 Groundwater Flow Velocity Calculations..... 12

5.0 Evaluation of Groundwater Quality Data ..... 14

Plant Gaston Gypsum Pond  
2022 Annual Groundwater Monitoring and Corrective Action Report

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5.1	Data Validation – Quality Assurance/Quality Control .....	14
5.2	Statistical Methodology and Tests .....	15
5.2.1	Appendix III Evaluation.....	15
5.2.2	Appendix IV Evaluation .....	16
5.3	Statistical Exceedances .....	17
5.3.1	Appendix III Constituents .....	17
5.3.2	Appendix IV Constituents.....	18
5.3.2.1	First Semi-Annual Groundwater Monitoring Event.....	18
6.0	ALTERNATE SOURCE DEMONSTRATION.....	20
6.1	Arsenic at GN-GSA-MW-1 .....	20
6.2	Barium at GN-GSA-MW-1.....	21
7.0	Summary and Conclusions .....	22
8.0	References.....	23

## **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 6A	Potentiometric Surface Contour Map (April 11, 2022)
Figure 6B	Potentiometric Surface Contour Map (August 15, 2022)

## **TABLES**

Table 1a	Compliance Monitoring Well Network Details
Table 1b	Piezometer Well Network Details
Table 2	Monitoring Parameters and Reporting Limits
Table 3	Groundwater Elevation Summary
Table 4a	Relative Percent Difference Calculations
Table 4b	Field QC: Blank Detections
Table 5	Summary of Background Levels and Groundwater Protection Standards
Table 6	First Semi-Annual Monitoring Event Analytical Summary
Table 7	Second Semi-Annual Monitoring Event Analytical Summary

## **APPENDICES**

Appendix A	Historical Analytical Data
Appendix B	Historical Groundwater Elevations Summary
Appendix C	Laboratory and Field Records
Appendix D	Horizontal Groundwater Flow Velocity Calculations
Appendix E	Statistical Analysis
Appendix F	Alternate Source Demonstration Report: Barium at GN-GSA-MW-1 (June 2022)



## 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"
NAVD88	North American Vertical Datum of 1988
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	United States Geological Survey
UTLs	Upper Tolerance Limits

## **1.0 INTRODUCTION**

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D) and the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, this 2022 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2022 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 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 2022 and the Site has remained in assessment monitoring. Statistically significant levels (SSLs) of the Appendix IV parameter, barium, were identified during the first and second semi-annual monitoring events of 2022 in well GN-GSA-MW-1.

An Alternate Source Demonstration (ASD) for barium was performed and submitted to ADEM in June 2022 to demonstrate that the Gypsum Pond is not the source of barium in well GN-GSA-MW-1. If the ASD is not approved by the Department, the facility will move into an assessment of corrective measures (ACM) in accordance with the requirements of § 257.96 and ADEM Admin. Code r. 335-13-15-.06(7).

### 3.0 SITE LOCATION AND DESCRIPTION

Alabama Power Company (APC) 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.

### 3.1 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 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.

### 3.2 SITE 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. 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-foot-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 is found in the Coosa, Cahaba, Birmingham-Big Canoe, and Murphrees Valleys. It 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, because 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 by infiltration of meteoric water, and likely is transmitted through macropore, funneled, or unstable flow processes.

### **3.2.1 Uppermost Aquifer**

The first zone of saturation, or uppermost aquifer, beneath the Site generally corresponds to more permeable overburden materials and weathered or fractured rock near the transition zone. These intervals are considered part of a local alluvial aquifer system and may be considered part of the Valley and Ridge Aquifer when no aquicludes 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. Within northern areas of the Site, groundwater is more likely to be observed in shallow rock due to thinner or more clay-rich overburden materials. Near the northeastern corner of the Plant Gaston Gypsum Pond, groundwater is not present in the overburden materials or at the overburden-rock interface. In this area, the 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 to the area could be a discrete network of fractures or a separate aquifer from other monitoring wells.

Major ions analyzed using Piper plots have indicated that groundwater is generally of a calcium-bicarbonate water type or geochemical facies. Typically, this indicates younger groundwater and or water interacting with carbonate-rich aquifer materials such as the Newala Limestone (and overburden derived from weathered Newala Limestone). Wells to the west and northwest show higher sulfate contributions – likely related to the localized presence and weathering/dissolution of sulfur-bearing minerals (such as pyrite). Well, GN-GSA-MW-11, shows a sodium-chloride water type signature, which indicates potential mixing or upwelling of older groundwater (perhaps along a structural features or zone of preferential discharge).

### **3.2.2 Flow Interpretation**

Groundwater flow at the Site is generally from north to south, southeast, and towards Yellowleaf Creek. Groundwater flow is accomplished by porous or Darcian flow mechanics through coarse overburden

materials, fractures, or other discontinuities within the Newala Limestone. A potentiometric surface map for the Site is presented in a later section.

### 3.3 GROUNDWATER MONITORING SYSTEM

Pursuant to § 257.91 and ADEM Admin. Code r. 335-13-15-.06(2), Plant Gaston has installed a groundwater monitoring well network to monitor groundwater quality 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. Wells were sited to serve as upgradient, or downgradient monitoring locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps. All groundwater monitoring wells were designed and constructed using “Design and Installation of Groundwater Monitoring Wells in Aquifers,” ASTM Subcommittee D18.21, as a guideline.

#### 3.3.1 Monitoring Wells

The detection and compliance groundwater monitoring network consists of 14 monitoring wells installed around the perimeter of the Gypsum Pond. Monitoring well locations and piezometers are presented on **Figure 5, Monitoring Well Location Map**.

##### 3.3.1.1 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. Upgradient monitoring wells are installed in overburden soils or shallow Newala limestone near the overburden-rock interface. These wells intercept upgradient groundwater just north of the Gypsum Pond. **Table 1a, Compliance Monitoring Well Network Details** summarizes well construction details for upgradient monitoring well locations.

##### 3.3.1.2 Downgradient Wells

Monitoring well locations GN-GSA-MW-1 and GN-GSA-MW-5 through GN-GSA-MW-13 are used 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. Downgradient monitoring wells generally monitor groundwater quality in overburden soils or shallow Newala limestone near the overburden-rock interface. The lone exception is monitoring well GN-GSA-MW-1 which monitors a deeper zone within the Newala Limestone. This well is approximately 168 feet deep which is significantly deeper than other upgradient and downgradient wells which typically range between 30 and 55 feet in depth. **Table 1a** summarizes well construction details for downgradient monitoring well locations.

### **3.3.1.3 Piezometers**

Location GN-GSA-PZ-4, formerly GN-GSA-MW-4, is used as a water-level only piezometer. The location helps constrain Site groundwater flow conditions and potentiometric surface contour maps. Additionally, locations GN-GSA-GS2-1 and GN-GSA-GS2-4 are also used as water-level only piezometers. These two locations were installed in 2014 and 2015, respectively, as part of a landfill siting investigation near the gypsum pond. GN-GSA-GS2-1 and GN-GSA-GS2-4 are not permitted as part of the compliance well network for the Gaston Gypsum Pond. **Table 1b, Piezometer Well Network Details** summarizes well construction details for this location.

### **3.3.1.4 Monitoring Well Replacement and Abandonment**

Monitoring well replacement and/or abandonment activities were not performed during the 2022 annual groundwater monitoring period.

## **3.4 GROUNDWATER MONITORING HISTORY**

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



### **3.4.1 Available Monitoring Data**

Laboratory analytical data is available for the groundwater monitoring history outlined in **Section 3.4**. Tabulated results for Appendix III and Appendix IV constituents by monitoring well are included in **Appendix A, Historical Analytical Data**.

### **3.4.2 Historical Groundwater Flow**

Historical potentiometric data from the Site show that groundwater flow is generally from north to south, southeast, and towards Yellowleaf Creek. Groundwater flow is accomplished by porous or Darcian flow mechanics through coarse overburden materials. Non-darcian flow through fractures, or other discontinuities within the Newala Limestone, is also present and specifically to the north and northeast of the Gypsum Pond where overburden saturation was absent during initial field investigations.

Tables summarizing groundwater elevations from all groundwater monitoring events are included in **Appendix B, Historical Groundwater Elevations Summary**.

### **3.4.3 Monitoring Variance**

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

## **3.5 GROUNDWATER SAMPLING AND ANALYSIS**

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

During routine semi-annual monitoring events, all compliance wells are sampled and analyzed for Appendix III and Appendix IV constituents. Additional general chemistry constituents (major ions and

anions) are now being collected routinely as well. These non-compliance parameters will be periodically analyzed to explore seasonal changes in geochemical facies in Site groundwater.

The following subsections summarize the sequential steps and process for the sampling, handling/transport, and analysis of compliance-related groundwater samples at the Site.

### **3.5.1 Groundwater Sample Collection**

Prior to recording water levels and collecting samples, each well was opened and allowed to equilibrate to atmospheric pressure. Within a 24-hour period, depths to groundwater were measured to the nearest 0.01 foot with an electronic water level indicator with depth referenced from the top of the inner PVC well casing. Groundwater elevations were calculated by subtracting the depth to groundwater from surveyed top-of-casing (TOC) elevations.

Groundwater samples were collected from monitoring wells using low-flow sampling procedures in accordance with § 257.93(a) and ADEM Admin. Code r. 335-13-15-.06(4)(a). All monitoring wells at Plant Gaston are equipped with a dedicated pump. Monitoring wells were purged and sampled using low-flow sampling procedures. In this procedure, field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen) are measured to determine stabilization, and groundwater samples are collected when the following stabilization criteria are met:

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

During purging and sampling an AquaTroll 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 event are included in **Appendix C, Laboratory and Field Records**.

### **3.5.2 Sample Preservation and Handling**

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

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

### **3.5.3 Chain of Custody**

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

### **3.5.4 Laboratory Analysis**

Laboratory analyses were performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama and Pace Analytical Services, LLC (Pace). Both APCEL and Pace 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 from Site groundwater samples. Groundwater data and chain of custody records for the monitoring event are presented in **Appendix C**.

### **3.5.5 Monitoring Period Sampling Events**

As required by § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f), the following describes monitoring-related activities performed during the preceding annual monitoring period. The first and second semi-annual Assessment Monitoring sampling events were performed in April and August of 2022, respectively.

Additionally, in February 2022, a verification re-sample was conducted for barium concentrations recently observed in samples collected from well GN-GSA-MW-1 and after statistical analyses from the second semi-annual monitoring event of 2021 indicated an SSL. Subsequently, after verification results confirmed the SSL, a special sampling event was conducted in adjacent piezometers for purposes of an ASD. The location and details of these piezometers as well as the data is presented in detail in the ASD report.

Groundwater samples were analyzed for the full list of Appendix III and Appendix IV parameters during each Assessment Monitoring event. All groundwater sampling activities were conducted by APC Field and Water Services. Pace Analytical Services performed the laboratory analyses of Radium-226 and Radium-228 (reported combined). APCEL performed the remaining Appendix III and Appendix IV analyses. Analytical data from the groundwater monitoring events is included as **Appendix C** in accordance with the requirements of § 257.90(e)(3) and ADEM Admin. Code r. 335-13-15-.06(1)(f)3.

#### 4.0 GROUNDWATER ELEVATIONS AND FLOW

During the first semi-annual groundwater sampling event, groundwater elevations ranged from 396.87 to 423.62 feet NAVD88 (feet above reference 1988 North American Vertical Datum). **Figure 6A, Potentiometric Surface Contour Map (April 11, 2022)** depicts groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

During the second semi-annual groundwater sampling event, groundwater elevations ranged from 395.61 to 414.03 feet NAVD88 (feet above reference 1988 North American Vertical Datum). **Figure 6B, Potentiometric Surface Contour Map (August 15, 2022)** depicts groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

As shown on **Figures 6A and 6B**, groundwater flows from north to the south-southeast, consistent with historic observations. A minor change in groundwater flow interpretation was initiated near the southern boundary of the gypsum pond following the April 2022 monitoring period. GN-GSA-MW-9, which resides within a topographic high demonstrates flow northward towards the Gypsum Pond. This results in a convergence of groundwater flow along an axis from wells GN-GSA-MW-8 to GN-GSA-MW-11. The interpreted potentiometric contour lines shown on **Figure 6A and 6B** suggest the potential (1) presence of a small-scale no-flow boundary and (2) periodic/seasonal shift from downgradient to upgradient in the direct vicinity of GN-GSA-MW-9.

Groundwater elevation data from the recent semi-annual sampling event has been tabulated and included in **Table 3, Groundwater Elevation Summary**. It should be noted that locations GN-GSA-PZ-4, GN-GSA-MW-3, GN-GSA-MW-2, GN-GSA-MW-1, and GN-GSA-MW-13 are screened in the Newala Limestone (determined as first sufficient yielding groundwater zones at these locales) and the presence of small magnitude vertical gradients may be present and account for variability in interpreted potentiometric contours. Well location GN-GSA-MW-1 is not used to guide interpreted potentiometric contours as this well is sufficiently deep within the Newala to suspect that a vertical gradient exists between this deep zone and shallower groundwater producing zones.

To facilitate further understanding of trends and correlating relationships, AquaTROLL multi-parameter sonde instrumentation is being utilized at select key Site observation and monitoring well locations for the near continuous monitoring of groundwater elevation and field parameter data. This additional data will allow for a better understanding of fluctuations in groundwater levels and geochemistry driven by the response of site flow systems and possible correlations/changes noted in semi-annual monitoring data.

AquaTROLL instrumentation was installed at the Gypsum Pond from October to December 2022 in the following site compliance monitoring wells:

- GN-GSA-MW-3,
- GN-GSA-MW-5,
- GN-GSA-MW-6, and
- GN-GSA-MW-10.

#### 4.1 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 chosen for each sampling event. Well pairs demonstrating reasonably straight-line flow paths are typically selected, but if absent, interpreted potentiometric contours can be more representative.

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

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

Where:

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

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

$i$  = Horizontal hydraulic gradient

$n_e$  = Effective porosity

Using this equation, horizontal groundwater flow velocity is calculated for the Site and is tabulated in **Appendix D, Horizontal Groundwater Flow Velocity Calculations**. **Appendix D** presents estimated horizontal flow velocities calculated using groundwater elevation data from the first and second 2022 semi-annual groundwater sampling events.

## 5.0 EVALUATION OF GROUNDWATER QUALITY DATA

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

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

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

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the relative percent differences (RPD) are below 20%, the difference is considered acceptable, and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 4A, Relative Percent Difference Calculations**, provides the RPD for sample and sample duplicates during the first and second semi-annual groundwater monitoring events of 2022. All RPDs were below 20% during the 2022 annual groundwater monitoring period.

Analytical data reviewed provided low-level or trace detections in field and or equipment blanks during monitoring period sampling events. **Table 4B, Field QC: Blank Detections** provides a summary of low-level detections observed during the first semi-annual monitoring event. Each of these detections were estimated concentrations, above the MDL but below the RL, and qualified in the laboratory analytical reports with “J flags.” However, if concentrations are detected above the MDL in field QC samples, original results on the (1) date of a blank detection and (2) with a value less than 5 times the field QC detection are flagged with a (+) U\* and MDL/RL values modified based upon the blank concentration.

Validated flags do not have an impact on possible statistical analyses due to: (1) low-level concentrations flagged during validation and or (2) constituents flagged are not Site COI. The extent of trace chromium detections in blanks can be explained by a low MDL value of 0.000203 mg/L. Blank detections were not reported for QC samples collected in the field during the second 2022 semi-annual monitoring event, therefore, data validation and qualifications were not required.

## 5.2 STATISTICAL METHODOLOGY AND TESTS

Sanitas statistical software is used to perform the statistical analyses on Site data. Sanitas is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by EPA regulations. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

### 5.2.1 Appendix III Evaluation

Intrawell prediction limits, combined with a 1-of-2 verification strategy, are used 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, are used to evaluate 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 and included in the revised Statistical Analysis Plan (August 2020). 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% non-detects in the background, simple substitution of one-half the reporting limit is used in the statistical analysis. The reporting limit used for non-detects is the practical quantitation limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects the Kaplan-Meier non-detect adjustment is applied to the background data
- Non-parametric prediction limits are used on data containing greater than 50% non-detects.

### 5.2.2 Appendix IV Evaluation

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

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

As described in 40 CFR §257.95(h)(1)-(3) and the ADEM Variance (see **Section 3.4.3**), the GWPS is:

- (1) The maximum contaminant level (MCL) established under 40 CFR §141.62 and 141.66.
- (2) Where an MCL has not been established:

- (i) Cobalt 0.006 mg/L.
  - (ii) Lead 0.015 mg/L.
  - (iii) Lithium 0.040 mg/L.
  - (iv) Molybdenum 0.100 mg/L.
- (3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

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

### 5.3 STATISTICAL EXCEEDANCES

Analytical data from the 2022 annual groundwater monitoring period were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (October 2017; updated August 2020) and were analyzed 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.

#### 5.3.1 Appendix III Constituents

Based on review of the Appendix III statistical analysis presented in **Appendix E, Statistical Analysis**, Appendix III constituents have not returned to background levels. A review of the Sanitas results, presented in **Appendix E**, identified the following Appendix III SSIs during the first 2022 semi-annual monitoring event:

- GN-GSA-MW-1: Fluoride.
- GN-GSA-MW-5: Calcium, Sulfate, TDS.
- GN-GSA-MW-6: pH.
- GN-GSA-MW-8: Sulfate.
- GN-GSA-MW-11: Chloride.
- GN-GSA-MW-12: Calcium.
- GN-GSA-MW-14S: Calcium.

A review of the Sanitas results identified the following Appendix III SSIs during the second 2022 semi-annual groundwater monitoring event:

- GN-GSA-MW-1: Calcium, Fluoride.
- GN-GSA-MW-2: Calcium.
- GN-GSA-MW-5: Calcium, Sulfate, TDS.
- GN-GSA-MW-6: pH.
- GN-GSA-MW-7: Calcium.
- GN-GSA-MW-8: Sulfate.
- GN-GSA-MW-9: Calcium.
- GN-GSA-MW-10: Calcium.
- GN-GSA-MW-11: Chloride.
- GN-GSA-MW-12: Calcium.

A review of data in aggregate appears to show increasing calcium associated with decreasing pH during the current monitoring period. Decreasing pH likely reflects increased rainfall and recharge of more acidic meteoric water and the increase in calcium likely reflects the dissolution of carbonate minerals under more acidic conditions.

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

### 5.3.2 Appendix IV Constituents

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

#### 5.3.2.1 First Semi-Annual Groundwater Monitoring Event

A review of the Sanitas results presented in **Appendix E** identified the following Appendix IV SSLs during the first 2022 semi-annual groundwater monitoring event:

- GN-GSA-MW-1: Barium.

**Table 6, First Semi-Annual Monitoring Event Analytical Summary** provides a summary of all constituent concentrations for the first semi-annual sampling event of 2022.

A review of the Sanitas results presented in **Appendix E** identified the following Appendix IV SSLs during the second 2022 semi-annual groundwater monitoring event:

- GN-GSA-MW-1: Barium.

**Table 7, Second Semi-Annual Monitoring Event Analytical Summary** provides a summary of all constituent concentrations for the second semi-annual sampling event in 2022.

## **6.0 ALTERNATE SOURCE DEMONSTRATION**

Section 257.95(g)(3)(ii) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(ii) allows the owner or operator to demonstrate that a source other than the CCR unit caused an SSL and that the SSL was the result of an alternate source, or that the SSL resulted from errors in sampling, analysis or statistical evaluation, or from the occurrences of natural variation in groundwater quality. Alternate Source Demonstrations (ASD) were prepared for arsenic and barium at the GN-GSA-MW-1 well location and submitted to ADEM in December 2018 and June 2022, respectively. A detailed summary of each demonstration conducted for well GN-GSA-MW-1 are presented in the following sections.

### **6.1 ARSENIC AT GN-GSA-MW-1**

An ASD was submitted for GN-GSA-MW-1 as a part of the 2018 Annual Groundwater Monitoring and Corrective Action Report. This 2018 ASD efforts focused on arsenic, but some of the supporting lines of evidence apply to barium or are similar in characteristics. These lines of evidence are:

- 1) Constituents indicative of an FGD gypsum leachate impact (i.e., boron, calcium, sulfate, and total dissolved solids) do not occur at well GN-GSA-MW-1 at elevated concentrations.
- 2) Correlation patterns indicative of increasing barium because of an FGD gypsum leachate impact have not materialized:
  - a. Barium-Boron: Pearson Correlation Coefficient (R) of 0.50 (Moderate to Weak Correlation)
  - b. Barium-Chloride: R of -0.45 (Moderate to Weak Correlation)
  - c. Barium-Conductivity: R of 0.57 (Moderate Correlation)
  - d. Barium-Sulfate: R of 0.03 (Poor Correlation)
- 3) Difference in depth and screened media of GN-GSA-MW-1 versus other compliance wells
  - a. GN-GSA-MW-1, Depth = ~168 feet; Screened: Newala Limestone
  - b. Other Wells, Depth = 30 to 55 feet; Screened: Overburden or Near Overburden-Rock Interface
- 4) Newala and other Cambro-Ordovician carbonates are natural sources of barium (minerals = barite and or witherite) as evidenced by literature and local/regional mining of barium minerals (Jones and McVay, 1934, Adams and Jones, 1940; Hughes and Lynch, 1973; Clark, 1983). Nearby documented sources include the following “districts”:
  - a. Vincent, Harpersville, Wilsonville District: Barite occurs in residuum of Cambro-Ordovician dolomite and limestone and derived from weathering of limestone.

- b. Longview Saginaw: Barite occurs in residual clay overlying Newala limestone as well as in brecciated Newala limestone.
- c. Sinks District: Barite occurs in residual clay overlying Newala or as veins in limestone which contain calcite, marcasite, sphalerite, goethite, and massive sulfur.

Since the submittal of the ASD report for Arsenic in 2018, concentrations detected during semi-annual monitoring events have steadily declined, and therefore, have not been identified as Appendix IV SSL. The ASD satisfies Federal rules and precludes the need to complete an ACM under § 257.96.

## **6.2 BARIUM AT GN-GSA-MW-1**

Following the identification of the Appendix IV SSL, barium, during the second 2021 semi-annual assessment monitoring period, an ASD was prepared and subsequently submitted to the Department in June 2022 (**Appendix F**). Multiple lines of evidence support the conclusion that the SSL for barium in well GN-GSA-MW-1 is naturally occurring and not the result of a release or impacts from the Gypsum Pond. The elevated levels are likely the result of variations in groundwater chemistry and subsurface heterogeneity not accommodated by the site statistics. This conclusion is supported by the following lines of evidence:

- 1) Barium is not typically a constituent associated with a CCR release and the SSL for barium is limited to a single downgradient monitoring well location.
- 2) CCR indicator parameters such as boron, sulfate, chloride, and calcium in well GN-GSA-MW-1 are not elevated above background concentrations.
- 3) Elevated barium concentrations are not observed in nearby monitoring wells that are screened more shallow and more likely to be impacted by a release from the Gypsum Pond.
- 4) Barium concentrations at GN-GSA-MW-1 have remained relatively stable over time with no evidence of variability that may be indicative of a leachate release.
- 5) A review of published geologic literature indicates that naturally occurring barium-containing minerals are present in the rock and soils in the Gypsum Pond vicinity.

If the ASD is not approved by the Department, the facility will move into an assessment of corrective measures (ACM) in accordance with the requirements of § 257.96 and ADEM Admin. Code r. 335-13-15-.06(7).

## 7.0 SUMMARY AND CONCLUSIONS

Statistically significant levels (SSLs) of the Appendix IV parameter, barium, were identified during the first and second semi-annual groundwater monitoring events of 2022 in well GN-GSA-MW-1. An Alternate Source Demonstration (ASD) for barium was submitted to ADEM in June 2022 to demonstrate that the Gypsum Pond is not the source of barium in well GN-GSA-MW-1.

The following summarizes results and activities conducted during 2022 annual monitoring period:

- Submitted the 2021 Annual Groundwater Monitoring and Corrective Action Report to the Department on January 31, 2022.
- Performed an Alternate Source Demonstration (ASD) for the Appendix IV parameter, barium, at well GN-GSA-MW-1 and submitted the report to the Department in June 2022.
- Completed the first semi-annual assessment groundwater monitoring event between April 11, 2022, and April 13, 2022.
- Submitted the first 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report to the Department on July 31, 2022.
- Completed the second 2022 semi-annual assessment groundwater monitoring event between August 16, 2022, and August 18, 2022.
- Installed multi-parameter groundwater monitoring instrumentation at select well locations from October to December 2022 as a tool for evaluating groundwater elevation fluctuations and field parameters in-between sampling events.

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

- Perform the first 2023 semi-annual assessment monitoring event in the spring of 2023 and submit the Semi-Annual Groundwater Monitoring and Corrective Action Report of 2023 to the Department by July 31, 2023.

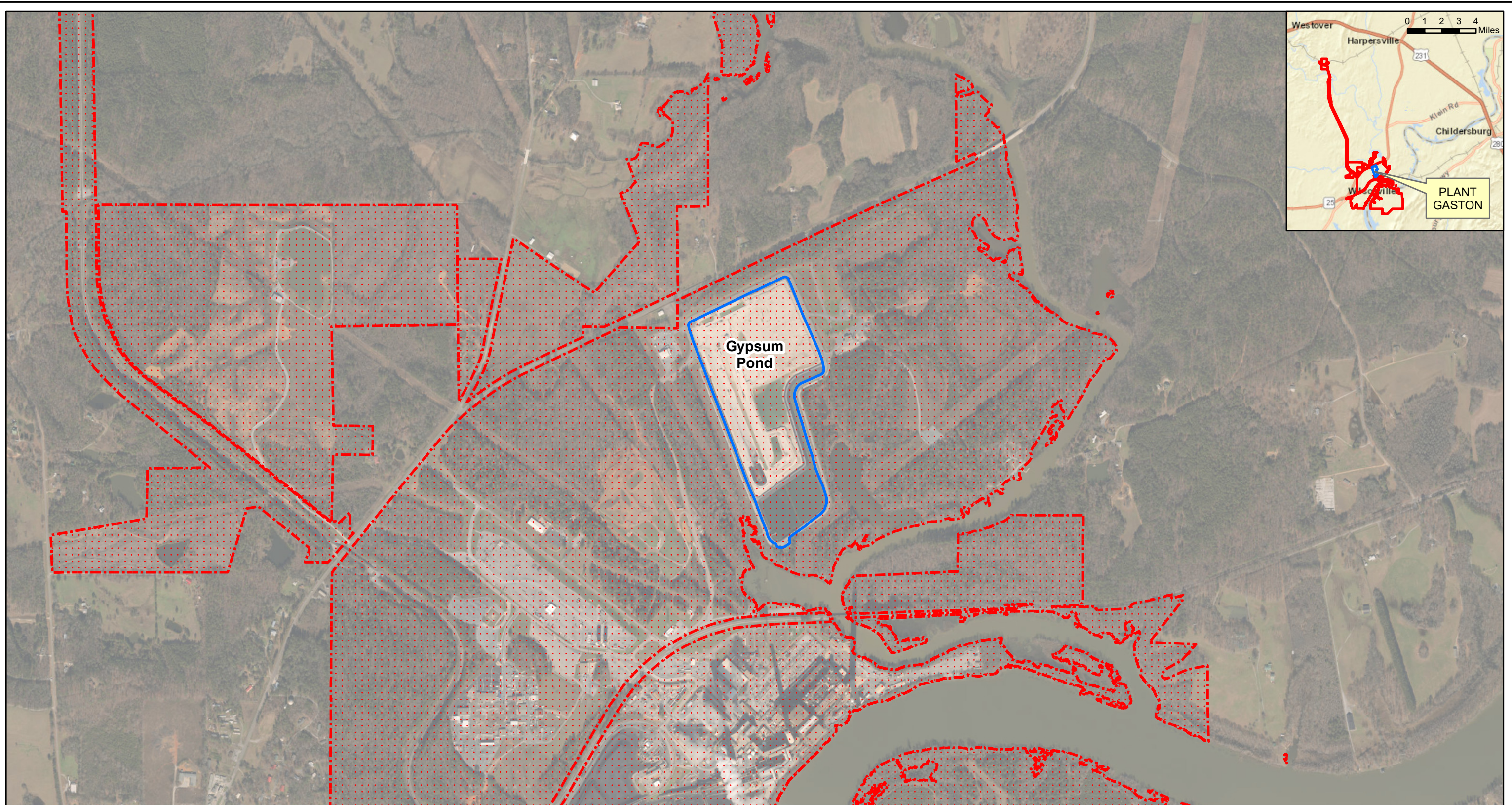
If the ASD is not approved by the Department, the facility will move into an assessment of corrective measures (ACM) in accordance with the requirements of § 257.96 and ADEM Admin. Code r. 335-13-15-.06(7).




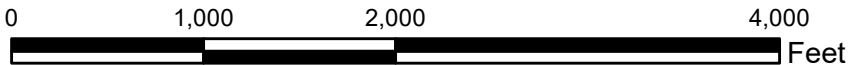

## 8.0 REFERENCES

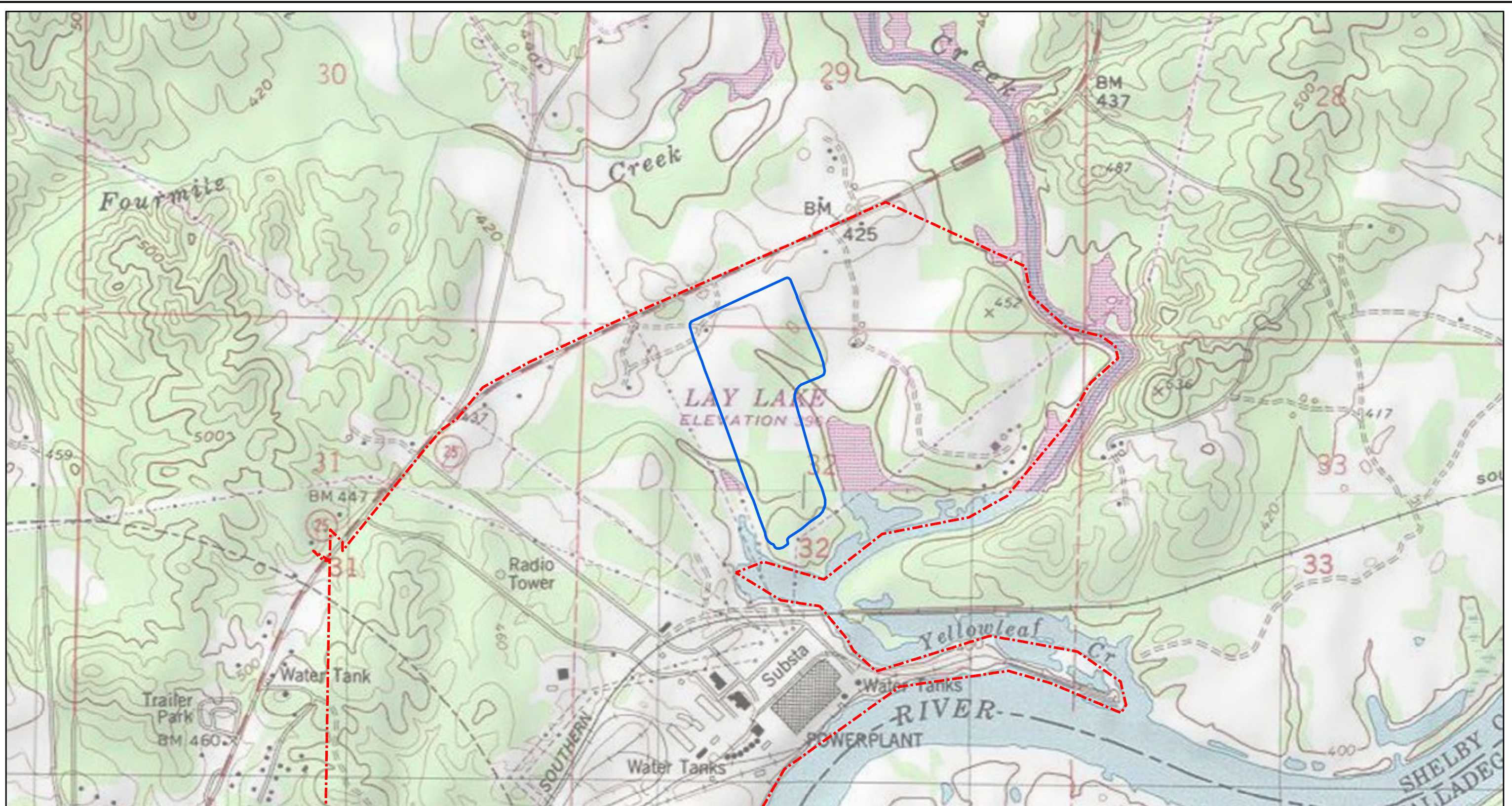
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# Figures

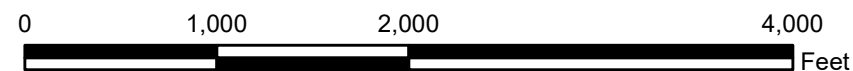


<b>Legend</b>  Gypsum Pond Boundary  Property Boundary (Approximate)				SCALE 1:12000	DRAWING TITLE <b>SITE LOCATION MAP          PLANT GASTON GYPSUM POND</b>
		DATE 11/13/2020	FIGURE NO <b>FIGURE 1</b>		
		DRAWN BY KWR			
		CHECKED BY GBD			



**Legend**

- Gypsum Pond
- Property Boundary (Approximate)



SCALE 1:12000

DATE 12/17/2019

DRAWN BY KWR

CHECKED BY GBD

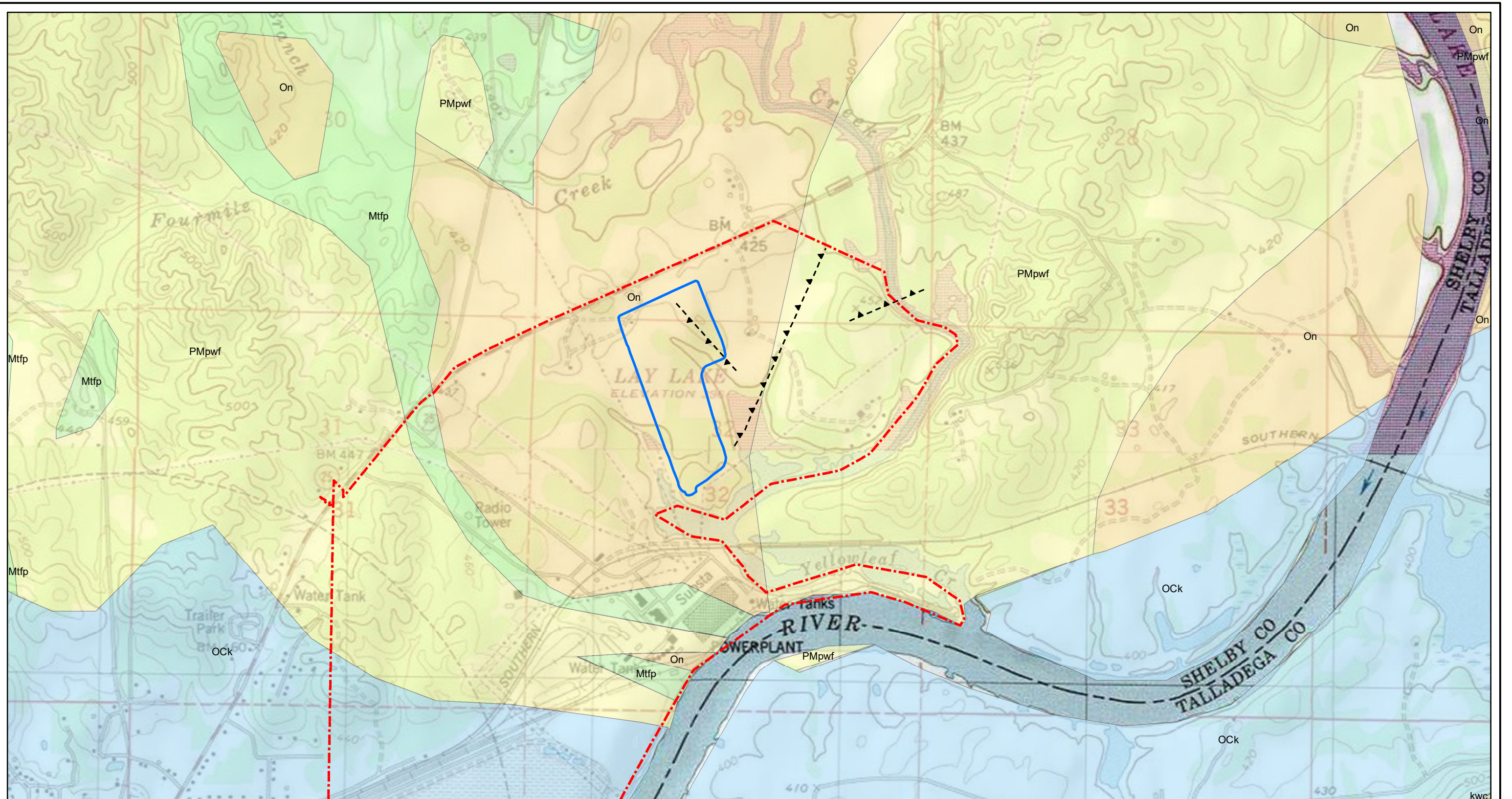
DRAWING TITLE

**SITE TOPOGRAPHIC MAP  
PLANT GASTON GYPSUM POND**

FIGURE NO

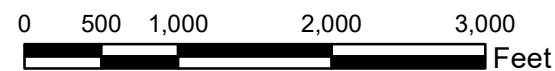
**FIGURE 2**





**Legend**

- |                                 |                                   |  |
|---------------------------------|-----------------------------------|--|
| Gypsum Storage Area Boundary    | <b>Geologic Units</b>             | Parkwood Formation and Floyd Shale undifferentiated (PMpwf)      |
| Property Boundary (Approximate) | Knox Group undifferentiated (Ock) | Tuscumbia Limestone and Fort Payne Chert undifferentiated (Mtfp) |
| Fault                           | Newala Limestone (On)             |  |



SCALE 1:15000

DATE 11/24/2021

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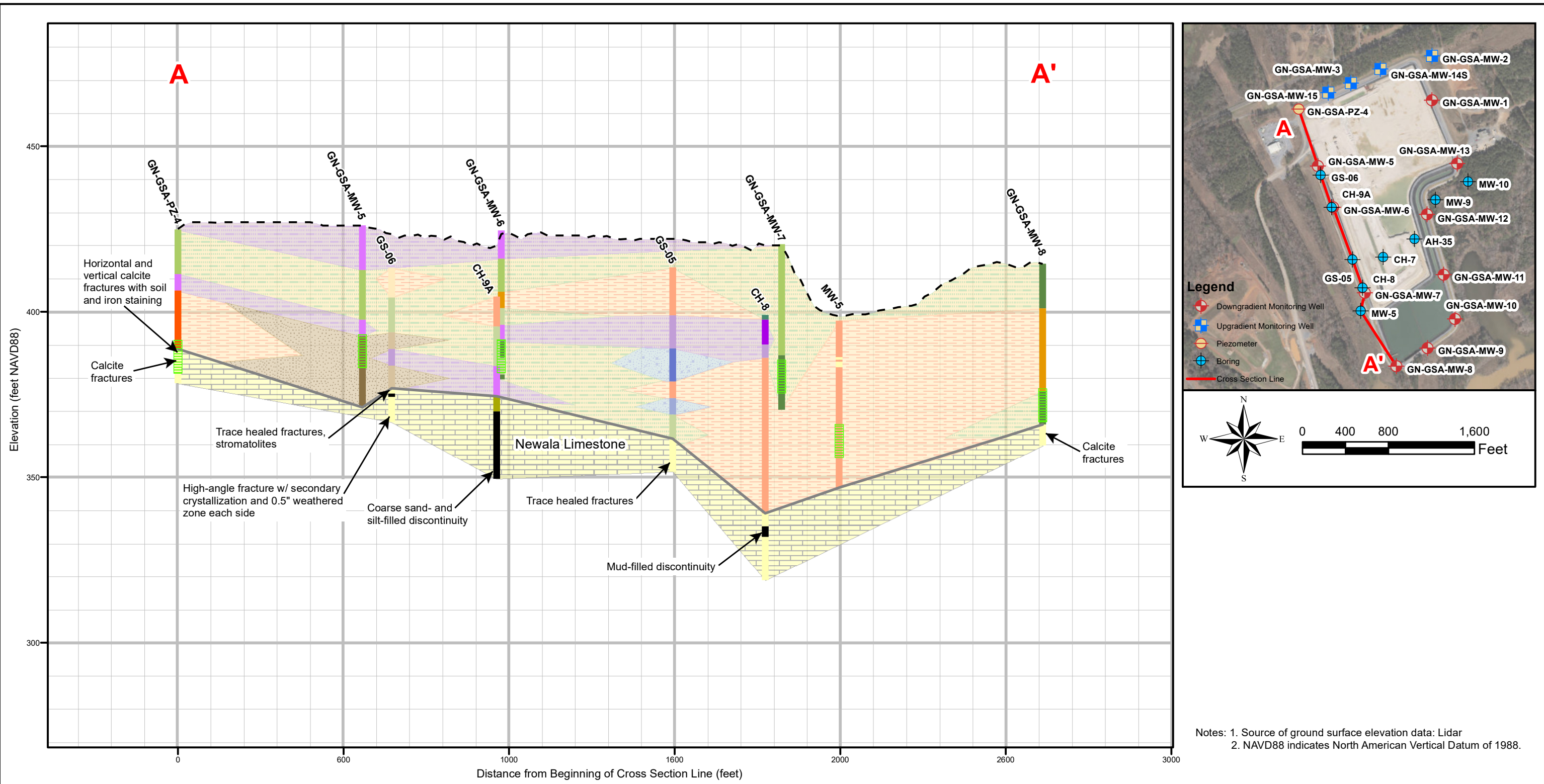
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**SITE GEOLOGIC MAP  
PLANT GASTON GYPSUM POND**

FIGURE NO

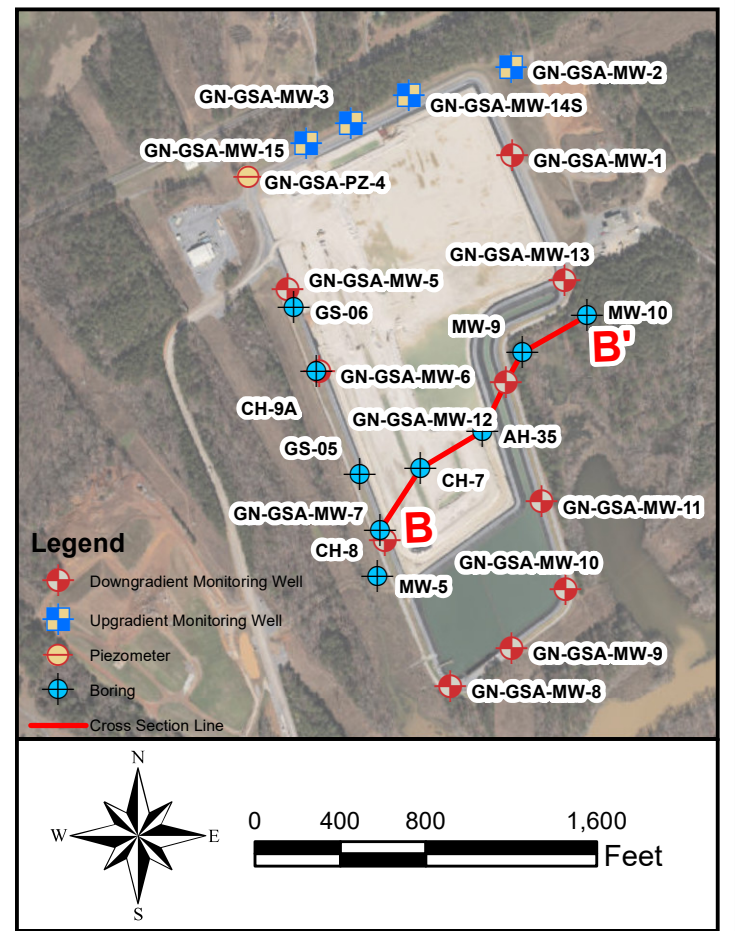
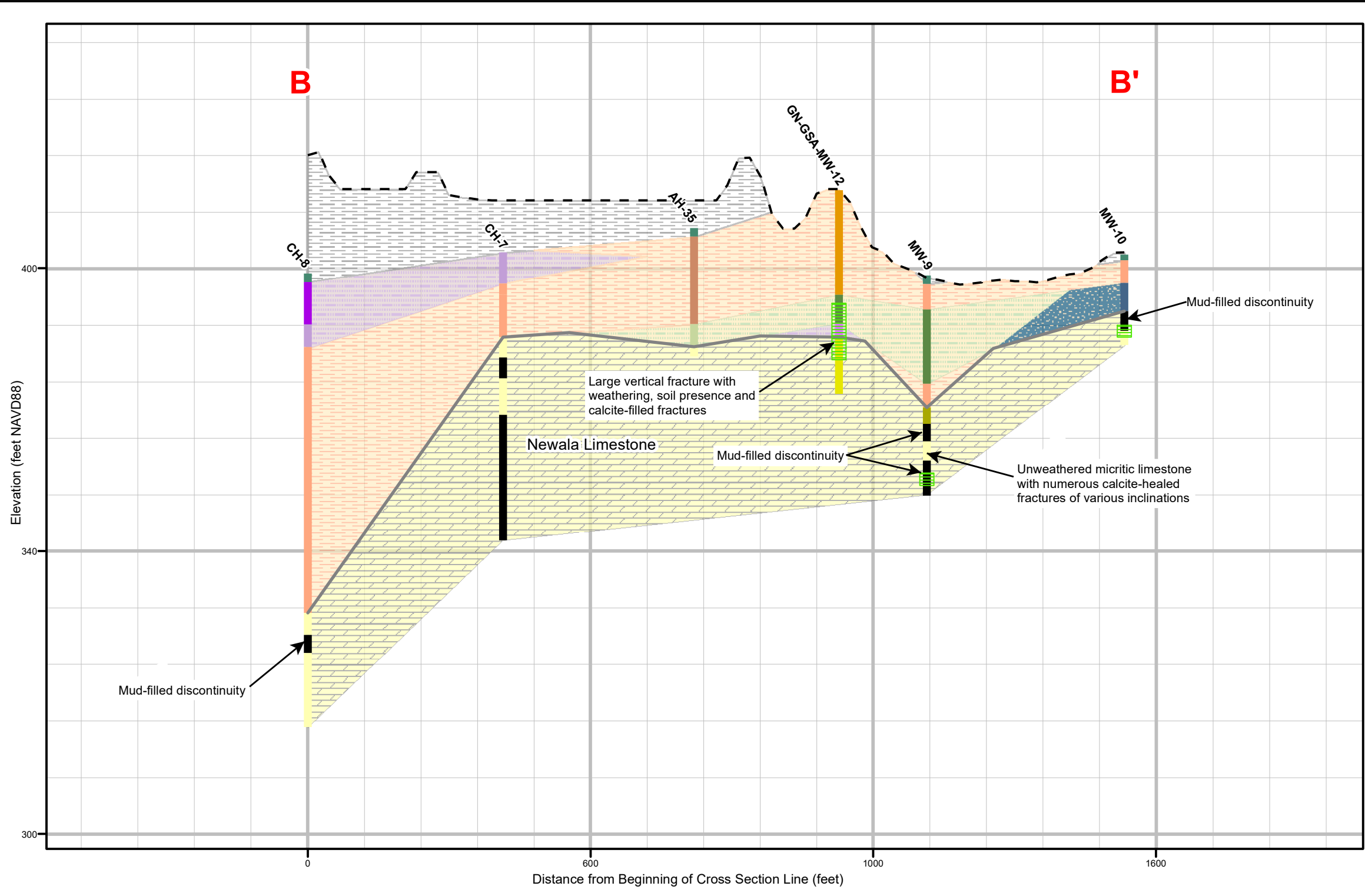
**FIGURE 3**





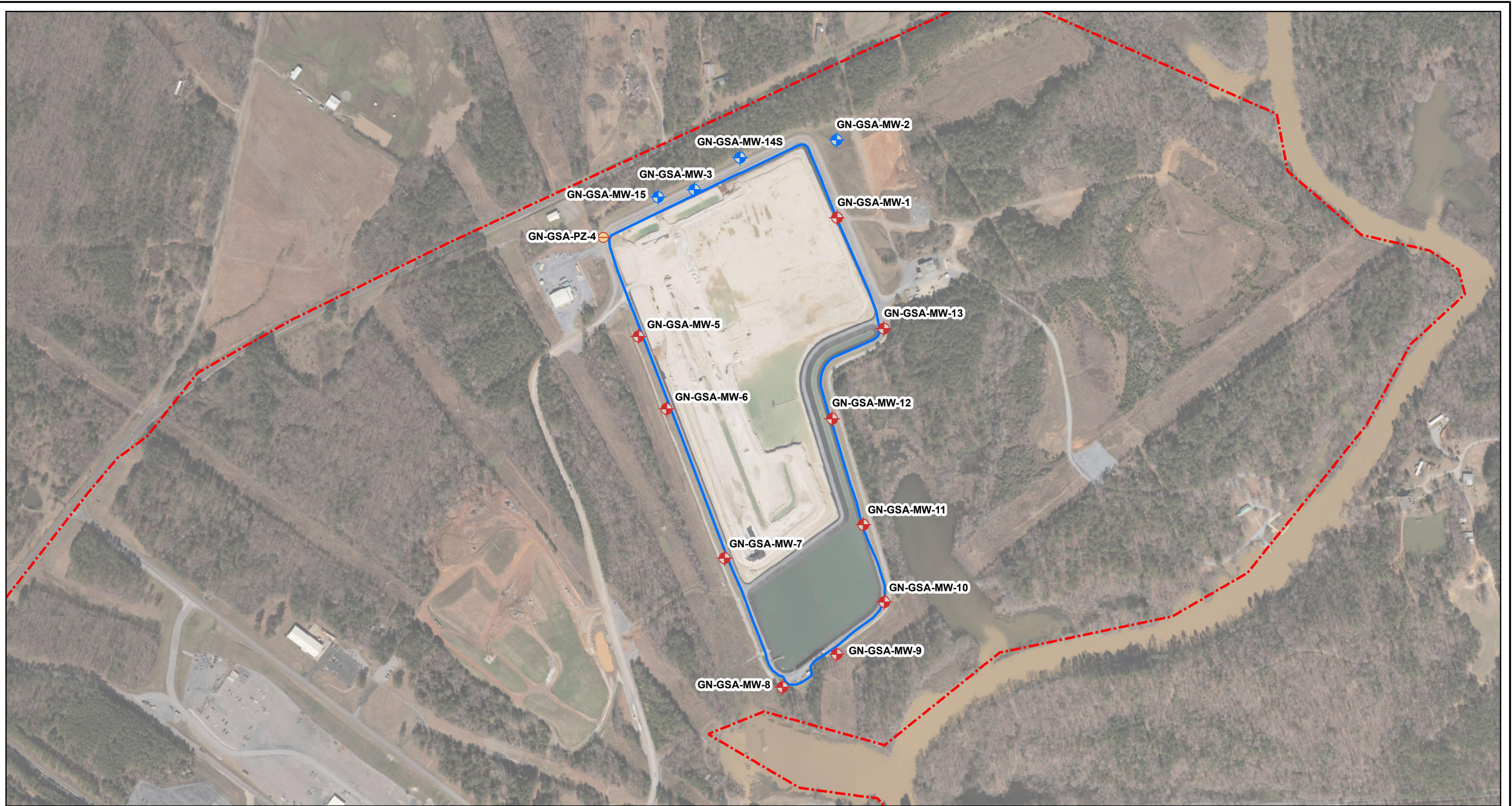
Notes: 1. Source of ground surface elevation data: Lidar  
 2. NAVD88 indicates North American Vertical Datum of 1988.






<b>Legend</b> 	<b>Borehole Descriptions</b> 			<b>Geologic Units</b> 			SCALE As Shown	DRAWING TITLE <b>GEOLOGIC CROSS-SECTION A - A'          PLANT GASTON GYPSUM POND</b>
	DATE 6/10/2020							
	DRAWN BY KWR							
	CHECKED BY GBD	FIGURE NO <b>FIGURE 4A</b>						

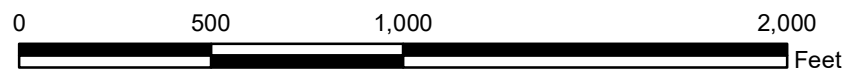


Notes: 1. Source of ground surface elevation data: Lidar  
 2. NAVD88 indicates North American Vertical Datum of 1988.


Legend			Borehole Descriptions			Geologic Units			SCALE	DRAWING TITLE	
Screen Interval	Discontinuity	Silt	Clayey Gravel	Dike Fill	As Shown	<b>GEOLOGIC CROSS-SECTION B - B'</b> <b>PLANT GASTON GYPSUM POND</b>		DATE	FIGURE NO <b>FIGURE 4B</b>		
Ground Surface Elevation	Topsoil	Sandy Silt	Well-graded Gravel	Clays	6/10/2020						
Unit Boundary	Lean Clay	Gravelly Silt	Sandstone	Silts	DRAWN BY						
	Silty Clay	Clayey Sand	Limestone	Sands	KWR	FIGURE NO		Southern Company			
	Clayey Silt to Silty Clay	Clayey Silty Sand	Dolomitic Limestone	Clayey Silty Sand	CHECKED BY	FIGURE NO					
		Silty Sand	Dolomite	Gravels	GBD	FIGURE NO					
				Sandstone		FIGURE NO					
				Limestone/Dolomite		FIGURE NO					

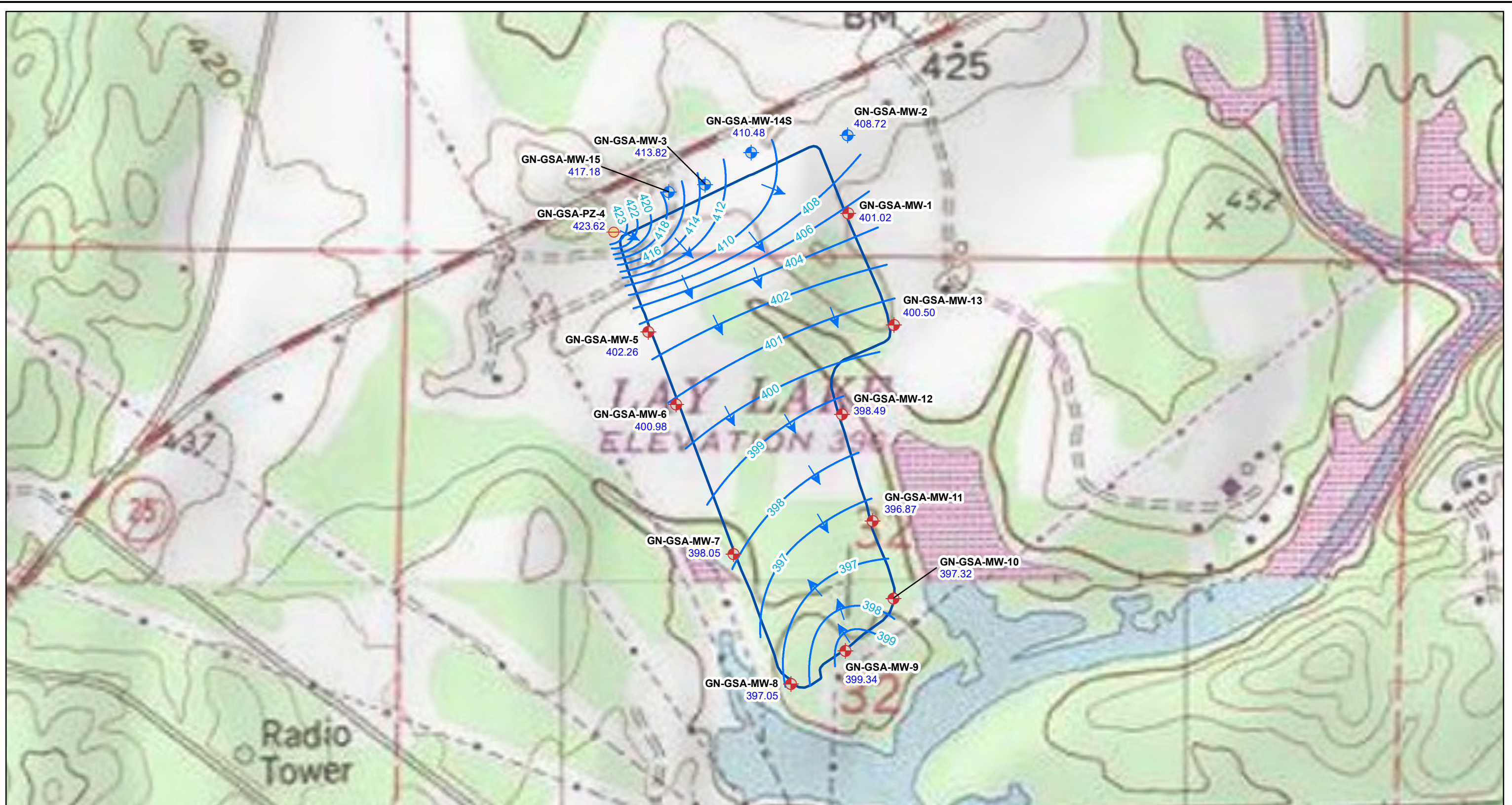


- Legend**
-  Downgradient Monitoring Well
  -  Upgradient Monitoring Well
  -  Piezometer
  -  Gypsum Pond Boundary
  -  Property Boundary (Approximate)



SCALE	1:6000
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DRAWN BY	KWR
CHECKED BY	GBD

DRAWING TITLE	
MONITORING WELL LOCATION MAP PLANT GASTON GYPSUM POND	
FIGURE NO	<b>FIGURE 5</b>
	



**Legend**

	Downgradient Monitoring Well
	Upgradient Monitoring Well
	Piezometer

GN-GSA-MW-1 Well ID  
401.02 Groundwater Elevation

	Potentiometric Surface Contour
	Approximate Groundwater Flow Direction
	Gypsum Storage Area Boundary



NOTES:  
 1. NAVD88 indicates North American Vertical Datum of 1988.  
 2. GN-GSA-MW-1 was not factored into potentiometric contouring due to depth of well (168.50 ft.) and installation in rock. Other wells are typically 30 to 55 feet deep and are screened in overburden or near the overburden-rock interface.

SCALE	1:6000
DATE	7/12/2022
DRAWN BY	KWR
CHECKED BY	GBD

DRAWING TITLE	
POTENTIOMETRIC SURFACE CONTOUR MAP APRIL 11, 2022 PLANT GASTON GYPSUM POND	
FIGURE NO	<b>FIGURE 6A</b>





**Legend**

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Piezometer
- Potentiometric Surface Contours
  - 5-foot interval (NAVD88)
  - 1-foot interval (NAVD88)
  - Approximate Groundwater Flow Direction
- Gypsum Storage Area Boundary

**GN-GSA-MW-1** Well ID  
397.87 Groundwater Elevation

0 500 1,000 2,000 Feet

NOTES:  
 1. NAVD88 indicates North American Vertical Datum of 1988.  
 2. \*GN-GSA-MW-1 was not factored into potentiometric contouring due to depth of well (168.50 ft.) and installation in rock. Other wells are typically 30 to 55 feet deep and are screened in overburden or near the overburden-rock interface.

SCALE	1:6000
DATE	11/7/2022
DRAWN BY	KAR
CHECKED BY	GBD

DRAWING TITLE  
**POTENTIOMETRIC SURFACE CONTOUR MAP**  
 AUGUST 15, 2022  
 PLANT GASTON GYPSUM POND

FIGURE NO  
**FIGURE 6B**

# Tables



**Table 1a. - Compliance Monitoring Well Network Details  
Plant Gaston Gypsum Storage Area**

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
<b>WELL NETWORK</b>											
GN-GSA-MW-2	Upgradient	Newala LS (Shallow)	33.25654	-86.4583	417.63	420.92	55.0	373.03	363.03	10	10/28/2015
GN-GSA-MW-3	Upgradient	Newala LS (Shallow)	33.25584	-86.46076	421.84	424.75	54.3	378.84	368.84	10	10/21/2015
GN-GSA-MW-14S	Upgradient	Overburden (Clayey-Sand)	33.2562	-86.45986	420.32	421.12	52.0	391.08	381.08	10	5/3/2016
GN-GSA-MW-15	Upgradient	Overburden-Newala LS Transition	33.25558	-86.46145	422.53	423.06	46.3	386.62	376.62	10	5/5/2016
GN-GSA-MW-1	Downgradient	Newala LS (Deep)	33.25541	-86.4583	423.21	426.35	168.5	310.21	300.21	10	11/5/2015
GN-GSA-MW-5	Downgradient	Overburden (Sand)	33.25371	-86.46175	426.08	429.33	55.0	393.08	383.08	10	11/19/2015
GN-GSA-MW-6	Downgradient	Overburden (Silty-Sand)	33.25265	-86.46128	424.55	427.40	45.0	391.55	381.55	10	11/17/2015
GN-GSA-MW-7	Downgradient	Overburden (Silty-Sand)	33.25047	-86.4603	420.38	423.47	50.0	385.38	375.38	10	11/10/2015
GN-GSA-MW-8	Downgradient	Overburden (Silty-Sand)	33.24859	-86.45932	414.51	417.31	54.9	376.71	366.71	10	10/28/2015
GN-GSA-MW-9	Downgradient	Overburden (Gravelly-Silt)	33.24907	-86.45838	414.76	417.51	44.0	381.96	371.96	10	10/29/2015
GN-GSA-MW-10	Downgradient	Overburden (Silty-Sand)	33.24982	-86.45755	414.78	417.73	40.0	387.18	377.18	10	12/9/2015
GN-GSA-MW-11	Downgradient	Overburden (Silty-Sand)	33.25095	-86.4579	414.81	417.47	31.0	394.21	384.21	10	11/12/2015
GN-GSA-MW-12	Downgradient	Overburden-Newala LS Transition	33.25249	-86.45842	413.80	416.71	36.0	393.80	383.80	10	10/29/2015
GN-GSA-MW-13	Downgradient	Newala LS (Shallow)	33.25379	-86.45751	419.82	422.42	45.0	385.22	375.22	10	12/15/2015

**Notes:**  
 ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing  
 (1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.  
 (2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD) 1988.  
 (3) Total well depth accounts for sump if data provided on well construction logs.



**Table 1b. - Piezometer Well Network  
Details Plant Gaston Gypsum Storage Area**

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
<b>WELL NETWORK</b>											
GN-GSA-PZ-4	Piezometer	Newala LS (Shallow)	33.25516	-86.46234	424.87	427.65	46.5	391.37	381.37	10	10/27/2015
GN-GSA-GS2-1	Piezometer	Newala LS (Shallow)	33.2566	-86.45745	415.28	418.46	24.4	400.88	390.88	10	10/12/2014
GN-GSA-GS2-4	Piezometer	Newala LS (Shallow)	33.25549	-86.45749	414.47	417.52	24.2	400.27	390.27	10	10/27/2015

**Notes:**

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS 84 from NAD 27/83, State Plane, Alabama, feet.

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

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

## Table 2. Parameters And Reporting Limits

Plant Gaston Gypsum Storage Area  
08/16/2022 - 08/18/2022

Appendix III Parameters			
Parameters	Analytical Methods	Reporting Limits	Units of Measure
Boron	EPA 200.7	0.1015	mg/L
Calcium	EPA 200.7	0.406-4.06	mg/L
Chloride	SM4500Cl E	1	mg/L
Fluoride	SM4500F G 2017	0.125	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	SM4500SO4 E 2011	2-16	mg/L
TDS	NA	NA	mg/L
Appendix IV Parameters			
Parameters	Analytical Methods	Reporting Limits	Units of Measure
Antimony	EPA 200.8	0.001015	mg/L
Arsenic	EPA 200.8	0.000203	mg/L
Barium	EPA 200.8	0.001015-0.005075	mg/L
Beryllium	EPA 200.8	0.001015	mg/L
Cadmium	EPA 200.8	0.000203	mg/L
Chromium	EPA 200.8	0.001015	mg/L
Cobalt	EPA 200.8	0.000203	mg/L
Fluoride	SM4500F G 2017	0.125	mg/L
Lead	EPA 200.8	0.000203	mg/L
Lithium	EPA 200.7	0.02	mg/L
Mercury	EPA 245.1	0.0005	mg/L
Molybdenum	EPA 200.8	0.000203	mg/L
Selenium	EPA 200.8	0.001015	mg/L
Thallium	EPA 200.8	0.000203	mg/L
Combined Radium 226 + 228	NA	NA	pCi/L

Notes:

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



### Table 3. Groundwater Elevations Summary

Plant Gaston Gypsum Storage Area  
04/11/2022 - 08/15/2022

Measurement Date		04/11/2022		08/15/2022	
Well	TOC Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)
GN-GSA-GS2-1	418.46	8.03	410.43	17.24	401.22
GN-GSA-GS2-4	417.52	12.32	405.20	16.28	401.24
GN-GSA-MW-1	426.35	25.71	400.64	28.86	397.49
GN-GSA-MW-10	417.73	20.72	397.01	22.11	395.62
GN-GSA-MW-11	417.47	20.82	396.65	22.08	395.39
GN-GSA-MW-12	416.71	18.61	398.10	20.71	396.00
GN-GSA-MW-13	422.42	22.24	400.18	25.31	397.11
GN-GSA-MW-14S	421.12	13.58	407.54	22.84	398.28
GN-GSA-MW-15	423.06	9.01	414.05	20.72	402.34
GN-GSA-MW-2	420.92	12.47	408.45	20.92	400.00
GN-GSA-MW-3	424.75	11.48	413.27	20.93	403.82
GN-GSA-MW-5	429.33	27.23	402.10	31.21	398.12
GN-GSA-MW-6	427.40	26.66	400.74	29.72	397.68
GN-GSA-MW-7	423.47	25.74	397.73	27.46	396.01
GN-GSA-MW-8	417.31	20.53	396.78	21.73	395.58
GN-GSA-MW-9	417.51	18.34	399.17	21.56	395.95

Notes:

ft. = feet; ft. NAVD = elevation in feet, referenced to North American Vertical Datum (1988); TOC = top of casing; BTOC = below top of casing; N/A = Not Acquired



**Table 4a. Relative Percent Difference (RPD) Calculations**

Plant Gaston Gypsum Storage Area  
04/12/2022 - 08/16/2022

<b>GN-GSA-MW-13</b>				
<b>Sample Date = 8/16/2022</b>				
<b>Analyte</b>	<b>Units</b>	<b>Original Result</b>	<b>Duplicate Result</b>	<b>RPD (%)</b>
Calcium	mg/L	107	111	3.67%
Chloride	mg/L	3.47	3.45	0.58%
Sulfate	mg/L	8.54	8.37	2.01%
Barium	mg/L	0.0383	0.0394	2.83%
<b>GN-GSA-MW-5</b>				
<b>Sample Date = 8/16/2022</b>				
<b>Analyte</b>	<b>Units</b>	<b>Original Result</b>	<b>Duplicate Result</b>	<b>RPD (%)</b>
Calcium	mg/L	94.8	88.4	6.99%
Chloride	mg/L	9.72	9.52	2.08%
Sulfate	mg/L	142	146	2.78%
Arsenic	mg/L	0.00134	0.00136	1.48%
Barium	mg/L	0.0743	0.0747	0.54%
Cobalt	mg/L	0.00389	0.0039	0.26%
<b>GN-GSA-MW-10</b>				
<b>Sample Date = 4/13/2022</b>				
<b>Analyte</b>	<b>Units</b>	<b>Original Result</b>	<b>Duplicate Result</b>	<b>RPD (%)</b>
Calcium	mg/L	107	104	2.84%
Chloride	mg/L	2.77	2.78	0.36%
Barium	mg/L	0.0403	0.0404	0.25%
<b>GN-GSA-MW-9</b>				
<b>Sample Date = 4/12/2022</b>				
<b>Analyte</b>	<b>Units</b>	<b>Original Result</b>	<b>Duplicate Result</b>	<b>RPD (%)</b>
Calcium	mg/L	50.4	49.4	2.00%
Chloride	mg/L	1.91	1.94	1.56%
Sulfate	mg/L	4.09	4.05	0.98%
Barium	mg/L	0.0252	0.0255	1.18%
Molybdenum	mg/L	0.00021	0.00024	10.67%

Notes:

1. The RPD calculations presented are for analyte pairs where original and duplicate results are valid, unqualified detections.
2. RPD calculation results less than or equal to 20% are considered acceptable.
3. Results greater than 20% are given data validation flags to indicate RPD criteria failure. Communication to sampling team and lab may be necessary to explore nature of RPD failure(s).



## Table 4b. - Field QC: Blank Detections

Plant Gaston Gypsum Storage Area  
04/12/2022 - 08/17/2022

Parameters Detected Above MDL					
Sample Date	QC Location	Parameter	Blank Concentration	Units	MDL
04/13/2022	FB-2	Chromium	0.00064 J	mg/L	0.0002

Notes:

1. Lab qualifiers have been appended to result when applicable
2. MDL = Method Detection Limit
3. Only Appendix 4 Constituents were compared and validated. Radium data was not validated.
4. mg/L = milligrams per liter





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

### Plant Gaston Gypsum Storage Area

Appendix IV Analytes			
Analyte	Units	Background	GWPS
Antimony	mg/L	0.00117	0.006
Arsenic	mg/L	0.000319	0.01
Barium	mg/L	0.0622	2
Beryllium	mg/L	0.001015	0.004
Cadmium	mg/L	0.000203	0.005
Chromium	mg/L	0.000699	0.1
Cobalt	mg/L	0.00313	0.006
Fluoride	mg/L	0.1114	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00046	0.1
Selenium	mg/L	0.00102	0.05
Thallium	mg/L	0.000228	0.002
Combined Radium 226 + 228	pCi/L	2.36	5

Notes:

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

## Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary  
Plant Gaston Gypsum Storage Area  
04/12/2022 - 04/13/2022

Field Parameters								
Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Upgradient	GN-GSA-MW-14S	04/13/2022	3.36	16.42	3.8	19.31	7.4	320.94
Upgradient	GN-GSA-MW-15	04/12/2022	3.77	115.18	9.73	20.47	5.25	27.47
Upgradient	GN-GSA-MW-2	04/12/2022	3.1	29.81	1.99	21.7	6.48	477.36
Upgradient	GN-GSA-MW-3	04/12/2022	1.75	132.02	1.12	20.83	5.57	250.86
Downgradient	GN-GSA-MW-1	04/13/2022	0.15	-58.89	1.56	20.05	7.5	379.96
Downgradient	GN-GSA-MW-10	04/13/2022	0.2	179.51	0.72	30.23	6.85	449.82
Downgradient	GN-GSA-MW-11	04/13/2022	0.46	285.42	0.57	29	5.29	140.99
Downgradient	GN-GSA-MW-12	04/13/2022	0.45	148.05	0.71	28.15	6.74	415.59
Downgradient	GN-GSA-MW-13	04/13/2022	1.61	18.85	0.85	19.83	6.84	459.11
Downgradient	GN-GSA-MW-5	04/12/2022	0.66	-13.09	1.24	25.39	6.32	599.71
Downgradient	GN-GSA-MW-6	04/12/2022	0.7	381.78	1.39	27.16	4.38	32.7
Downgradient	GN-GSA-MW-7	04/12/2022	1.36	155.76	1.05	30.35	6.73	379.98
Downgradient	GN-GSA-MW-8	04/12/2022	1.13	-83.82	2.91	28.08	7.22	294.59
Downgradient	GN-GSA-MW-9	04/12/2022	0.82	162.55	4.95	28.12	6.22	240.7
Piezometer	GN-GSA-GS2-4	04/12/2022	1.01	-1.81	3.19	18.98	6.29	550.79

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" 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. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.

## Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary  
Plant Gaston Gypsum Storage Area  
04/12/2022 - 04/13/2022

EPA Appendix III Set								
Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Upgradient	GN-GSA-MW-14S	04/13/2022	<0.03	58.9	2.42	<0.06	7.4	2.44
Upgradient	GN-GSA-MW-15	04/12/2022	<0.03	4.59	1.88	<0.06	5.25	1.76 J
Upgradient	GN-GSA-MW-2	04/12/2022	<0.03	87.1	3.23	<0.06	6.48	8.36
Upgradient	GN-GSA-MW-3	04/12/2022	<0.03	55.1	2.67	<0.06	5.57	7.36
Downgradient	GN-GSA-MW-1	04/13/2022	0.0353 J	47.5	2.17	0.307	7.5	4.24
Downgradient	GN-GSA-MW-10	04/13/2022	<0.03	107	2.77	<0.06	6.85	1.68 J
Downgradient	GN-GSA-MW-11	04/13/2022	0.0565 J	15	19.6	<0.06	5.29	2.73
Downgradient	GN-GSA-MW-12	04/13/2022	<0.03	88	3.76	<0.06	6.74	8.25
Downgradient	GN-GSA-MW-13	04/13/2022	<0.03	91.8	3.01	<0.06	6.84	7.27
Downgradient	GN-GSA-MW-5	04/12/2022	0.0481 J	94.1	7.35	<0.06	6.32	145
Downgradient	GN-GSA-MW-6	04/12/2022	<0.03	0.516	3.38	<0.06	4.38	<0.6
Downgradient	GN-GSA-MW-7	04/12/2022	<0.03	71.2	3.29	0.0724 J	6.73	5.75
Downgradient	GN-GSA-MW-8	04/12/2022	<0.03	54.4	1.54	0.0621 J	7.22	3.13
Downgradient	GN-GSA-MW-9	04/12/2022	<0.03	50.4	1.91	<0.06	6.22	4.09
Piezometer	GN-GSA-GS2-4	04/12/2022	<0.03	91	4.93	0.0798 J	6.29	23.2

Notes:

- "J" indicates the result was detected above the MDL but below the PQL
- "<" indicates the result was not detected above the MDL and is considered a non-detect.
- 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.
- DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
- mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.

## Table 6. First Semi-Annual Monitoring Event

### Analytical Results Summary Plant Gaston Gypsum Storage Area 04/12/2022 - 04/13/2022

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Upgradient	GN-GSA-MW-14S	04/13/2022	<0.000508	0.000143 J	0.0217	<0.000406	<6.8e-005	0.000699 J	<6.8e-005	<0.06
Upgradient	GN-GSA-MW-15	04/12/2022	<0.000508	0.000281	0.00927	<0.000406	<6.8e-005	0.000234 J	0.000658	<0.06
Upgradient	GN-GSA-MW-2	04/12/2022	<0.000508	0.000102 J	0.034	<0.000406	<6.8e-005	0.000518 J	<6.8e-005	<0.06
Upgradient	GN-GSA-MW-3	04/12/2022	<0.000508	<8.1e-005	0.0309	<0.000406	<6.8e-005	0.000249 J	<6.8e-005	<0.06
Downgradient	GN-GSA-MW-1	04/13/2022	<0.000508	0.00248	2.68	<0.000406	<6.8e-005	<0.000203	<6.8e-005	0.307
Downgradient	GN-GSA-MW-10	04/13/2022	<0.000508	<8.1e-005	0.0403	<0.000406	<6.8e-005	<0.000203	<6.8e-005	<0.06
Downgradient	GN-GSA-MW-11	04/13/2022	<0.000508	8.77e-005 J	0.0162	<0.000406	<6.8e-005	<0.000203	0.00324	<0.06
Downgradient	GN-GSA-MW-12	04/13/2022	<0.000508	0.00021	0.0272	<0.000406	<6.8e-005	0.00021 J	0.000155 J	<0.06
Downgradient	GN-GSA-MW-13	04/13/2022	<0.000508	0.000141 J	0.0415	<0.000406	<6.8e-005	0.000523 J	<6.8e-005	<0.06
Downgradient	GN-GSA-MW-5	04/12/2022	<0.000508	0.000896	0.0666	<0.000406	<6.8e-005	0.000287 J	0.00215	<0.06
Downgradient	GN-GSA-MW-6	04/12/2022	<0.000508	0.000109 J	0.0214	<0.000406	<6.8e-005	0.000221 J	0.000665	<0.06
Downgradient	GN-GSA-MW-7	04/12/2022	<0.000508	0.000431	0.0192	<0.000406	<6.8e-005	<0.000203	0.000601	0.0724 J
Downgradient	GN-GSA-MW-8	04/12/2022	<0.000508	0.00124	0.0294	<0.000406	<6.8e-005	0.000346 J	7.46e-005 J	0.0621 J
Downgradient	GN-GSA-MW-9	04/12/2022	<0.000508	0.000178 J	0.0252	<0.000406	<6.8e-005	<0.000203	<6.8e-005	<0.06
Piezometer	GN-GSA-GS2-4	04/12/2022	--	--	0.0781	--	--	--	--	0.0798 J

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" 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. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.

## Table 6. First Semi-Annual Monitoring Event

### Analytical Results Summary Plant Gaston Gypsum Storage Area 04/12/2022 - 04/13/2022

EPA Appendix IV Set								
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Upgradient	GN-GSA-MW-14S	04/13/2022	<6.8e-005	<0.007105	<0.0003	0.000247	<0.000508	<6.8e-005
Upgradient	GN-GSA-MW-15	04/12/2022	0.000226	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Upgradient	GN-GSA-MW-2	04/12/2022	<6.8e-005	<0.007105	<0.0003	0.000259	<0.000508	<6.8e-005
Upgradient	GN-GSA-MW-3	04/12/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.00051 J	<6.8e-005
Downgradient	GN-GSA-MW-1	04/13/2022	<6.8e-005	0.00966 J	<0.0003	0.0033	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-10	04/13/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-11	04/13/2022	0.000106 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-12	04/13/2022	<6.8e-005	<0.007105	<0.0003	0.00031	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-13	04/13/2022	<6.8e-005	<0.007105	<0.0003	0.00021	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-5	04/12/2022	<6.8e-005	<0.007105	<0.0003	0.000121 J	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-6	04/12/2022	0.000396	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-7	04/12/2022	<6.8e-005	<0.007105	<0.0003	0.000272	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-8	04/12/2022	<6.8e-005	<0.007105	<0.0003	0.00347	<0.000508	<6.8e-005
Downgradient	GN-GSA-MW-9	04/12/2022	0.000112 J	<0.007105	<0.0003	0.000213	<0.000508	<6.8e-005
Piezometer	GN-GSA-GS2-4	04/12/2022	--	--	--	--	--	--

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" 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. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.

## Table 6. First Semi-Annual Monitoring Event

### Analytical Results Summary Plant Gaston Gypsum Storage Area 04/12/2022 - 04/13/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Upgradient	GN-GSA-MW-14S	04/13/2022	0	0.0362 J	8.73	4.62	5.97	58.9	9.89	0.0336
Upgradient	GN-GSA-MW-15	04/12/2022	0	0.336	0.343 J	4.4	0.994	4.59	9.42	0.0512
Upgradient	GN-GSA-MW-2	04/12/2022	0	0.022 J	20.5	5.29	2.12	87.1	11.3	<0.00609
Upgradient	GN-GSA-MW-3	04/12/2022	0	0.0103 J	2.59	3.55	4.72	55.1	7.6	0.0187
Downgradient	GN-GSA-MW-1	04/13/2022	0	0.216	22.1	9.37	9.17	47.5	20.1	<0.00609
Downgradient	GN-GSA-MW-10	04/13/2022	0	<0.00812	1.81	4.24	2.03	107	9.07	<0.00609
Downgradient	GN-GSA-MW-11	04/13/2022	0	0.0323 J	2.76	3.43	5.34	15	7.34	0.0101 J
Downgradient	GN-GSA-MW-12	04/13/2022	0	0.0122 J	8.3	3.41	4.4	88	7.3	<0.00609
Downgradient	GN-GSA-MW-13	04/13/2022	0	<0.00812	10.5	4.6	3.31	91.8	9.84	<0.00609
Downgradient	GN-GSA-MW-5	04/12/2022	0	1.73	21.1	5.04	18.6	94.1	10.8	<0.00609
Downgradient	GN-GSA-MW-6	04/12/2022	0	0.0173 J	0.405 J	4.1	2.65	0.516	8.77	0.102
Downgradient	GN-GSA-MW-7	04/12/2022	--	0.056	9.14	3.37	5.12	71.2	7.21	<0.00609
Downgradient	GN-GSA-MW-8	04/12/2022	0	0.404	10.5	4.05	1.33	54.4	8.67	0.0152
Downgradient	GN-GSA-MW-9	04/12/2022	0	0.172	6.3	4.47	2.86	50.4	9.57	0.0171
Piezometer	GN-GSA-GS2-4	04/12/2022	0	--	--	--	--	91	--	--

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" 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. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.

## Table 6. First Semi-Annual Monitoring Event

### Analytical Results Summary Plant Gaston Gypsum Storage Area 04/12/2022 - 04/13/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L	Bicarbonate Alkalinity as CaCO3 mg/L	Carbon, Total Organic mg/L	Chloride mg/L
Upgradient	GN-GSA-MW-14S	04/13/2022	0.00854	0.634	0.271 J	183	1.59	181	<1	2.42
Upgradient	GN-GSA-MW-15	04/12/2022	0.0806	0.257 J	<0.2	12	-10000	12	<1	1.88
Upgradient	GN-GSA-MW-2	04/12/2022	0.000618	0.465 J	0.306	287	0.954	286	<1	3.23
Upgradient	GN-GSA-MW-3	04/12/2022	0.0169	7.94	<0.2	138	-10000	138	<1	2.67
Downgradient	GN-GSA-MW-1	04/13/2022	0.00661	1.07	<0.2	224	1.82	222	<1	2.17
Downgradient	GN-GSA-MW-10	04/13/2022	0.00712	<0.169505	<0.2	263	0.874	262	<1	2.77
Downgradient	GN-GSA-MW-11	04/13/2022	0.239	0.256 J	<0.2	33.6	-10000	33.6	<1	19.6
Downgradient	GN-GSA-MW-12	04/13/2022	0.0996	0.244 J	<0.2	223	0.603	222	<1	3.76
Downgradient	GN-GSA-MW-13	04/13/2022	0.00175	0.874	0.419	278	1.8	276	<1	3.01
Downgradient	GN-GSA-MW-5	04/12/2022	0.601	0.297 J	<0.2	198	1.8	196	1.62 J	7.35
Downgradient	GN-GSA-MW-6	04/12/2022	0.00805	<0.169505	<0.2	2.72	-10000	2.72	<1	3.38
Downgradient	GN-GSA-MW-7	04/12/2022	0.315	0.619	<0.2	206	0.902	205	1.45 J	3.29
Downgradient	GN-GSA-MW-8	04/12/2022	0.116	1.36	<0.2	182	2.44	179	<1	1.54
Downgradient	GN-GSA-MW-9	04/12/2022	0.0157	0.703	<0.2	151	1.89	149	<1	1.91
Piezometer	GN-GSA-GS2-4	04/12/2022	--	--	--	--	--	--	--	4.93

Notes:

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2. "<" 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. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.

## Table 6. First Semi-Annual Monitoring Event

### Analytical Results Summary Plant Gaston Gypsum Storage Area 04/12/2022 - 04/13/2022

General Chemistry and MNA Parameters			
Hydraulic Location	Well	Sample Date	Sulfate mg/L
Upgradient	GN-GSA-MW-14S	04/13/2022	2.44
Upgradient	GN-GSA-MW-15	04/12/2022	1.76 J
Upgradient	GN-GSA-MW-2	04/12/2022	8.36
Upgradient	GN-GSA-MW-3	04/12/2022	7.36
Downgradient	GN-GSA-MW-1	04/13/2022	4.24
Downgradient	GN-GSA-MW-10	04/13/2022	1.68 J
Downgradient	GN-GSA-MW-11	04/13/2022	2.73
Downgradient	GN-GSA-MW-12	04/13/2022	8.25
Downgradient	GN-GSA-MW-13	04/13/2022	7.27
Downgradient	GN-GSA-MW-5	04/12/2022	145
Downgradient	GN-GSA-MW-6	04/12/2022	<0.6
Downgradient	GN-GSA-MW-7	04/12/2022	5.75
Downgradient	GN-GSA-MW-8	04/12/2022	3.13
Downgradient	GN-GSA-MW-9	04/12/2022	4.09
Piezometer	GN-GSA-GS2-4	04/12/2022	23.2

Notes:

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.



## Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary  
Plant Gaston Gypsum Storage Area  
08/16/2022 - 08/18/2022

Field Parameters								
Hydraulic Location	Well	Sample Date	Conductivity uS/cm	DO mg/L	ORP mv	pH_Field SU	Field Temperature C	Turbidity NTU
Upgradient	GN-GSA-MW-14S	08/16/2022	367.82	0.95	-1.73	6.96	20.64	1.81
Upgradient	GN-GSA-MW-15	08/16/2022	114.27	2.67	230.94	5.37	21.72	6.48
Upgradient	GN-GSA-MW-2	08/16/2022	574.67	2.55	200.92	7.04	21.34	1.4
Upgradient	GN-GSA-MW-3	08/16/2022	307.36	2.08	179.75	6.25	21.9	1.24
Downgradient	GN-GSA-MW-1	08/18/2022	336.43	0.13	-135.73	7.46	20.53	0.79
Downgradient	GN-GSA-MW-10	08/17/2022	478.07	0.13	69.46	6.97	21	0.6
Downgradient	GN-GSA-MW-11	08/17/2022	123.98	0.5	206.21	5.6	21.58	0.35
Downgradient	GN-GSA-MW-12	08/18/2022	382.7	0.15	115.91	6.82	20.92	1.14
Downgradient	GN-GSA-MW-13	08/16/2022	564.9	0.81	197.48	6.92	20.31	0.98
Downgradient	GN-GSA-MW-5	08/16/2022	605.27	0.76	-6.95	6.28	19.62	0.65
Downgradient	GN-GSA-MW-6	08/16/2022	27.45	0.65	231.41	4.58	20.95	1.29
Downgradient	GN-GSA-MW-7	08/16/2022	399.01	1.45	118.82	6.7	25.91	0.92
Downgradient	GN-GSA-MW-8	08/16/2022	326.95	0.79	-48.95	6.98	21.67	1.24
Downgradient	GN-GSA-MW-9	08/17/2022	310.19	0.49	89.11	6.84	20.22	1.3

Notes:

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. NC = value not detected with alkalinity calculation

## Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary  
Plant Gaston Gypsum Storage Area  
08/16/2022 - 08/18/2022

EPA Appendix III Set								
Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Upgradient	GN-GSA-MW-14S	08/16/2022	<0.03	52.1	2.54	<0.06	6.96	4.71
Upgradient	GN-GSA-MW-15	08/16/2022	<0.03	4.13	2.27	<0.06	5.37	3.73
Upgradient	GN-GSA-MW-2	08/16/2022	<0.03	96.3	3.66	0.0865 J	7.04	8.31
Upgradient	GN-GSA-MW-3	08/16/2022	<0.03	50.5	3.08	<0.06	6.25	7.79
Downgradient	GN-GSA-MW-1	08/18/2022	<0.03	53.5	2.3	0.327	7.46	4.84
Downgradient	GN-GSA-MW-10	08/17/2022	<0.03	118	3.11	<0.06	6.97	2.24
Downgradient	GN-GSA-MW-11	08/17/2022	0.0528 J	12.6	19.5	<0.06	5.6	2.29
Downgradient	GN-GSA-MW-12	08/18/2022	<0.03	110	3.53	<0.06	6.82	6.66
Downgradient	GN-GSA-MW-13	08/16/2022	<0.03	107	3.47	0.0614 J	6.92	8.54
Downgradient	GN-GSA-MW-5	08/16/2022	0.0379 J	94.8	9.72	<0.06	6.28	142
Downgradient	GN-GSA-MW-6	08/16/2022	<0.03	0.516	3.64	<0.06	4.58	<0.6
Downgradient	GN-GSA-MW-7	08/16/2022	<0.03	82.2	3.8	0.112 J	6.7	6.63
Downgradient	GN-GSA-MW-8	08/16/2022	<0.03	58.4	1.69	0.0979 J	6.98	5.27
Downgradient	GN-GSA-MW-9	08/17/2022	<0.03	67.7	2.13	<0.06	6.84	4.58

Notes:

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- "<" indicates the result was not detected above the MDL and is considered a non-detect.
- 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.
- DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
- mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
- NC = value not detected with alkalinity calculation

## Table 7. Second Semi-Annual Monitoring Event

### Analytical Results Summary Plant Gaston Gypsum Storage Area 08/16/2022 - 08/18/2022

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Upgradient	GN-GSA-MW-14S	08/16/2022	<0.000508	0.00014 J	0.0251	<0.000406	<6.8e-005	0.000574 J	0.000124 J	<0.06
Upgradient	GN-GSA-MW-15	08/16/2022	<0.000508	0.000298	0.0074	<0.000406	<6.8e-005	0.000374 J	0.000587	<0.06
Upgradient	GN-GSA-MW-2	08/16/2022	<0.000508	8.24e-005 J	0.0314	<0.000406	<6.8e-005	0.000633 J	<6.8e-005	0.0865 J
Upgradient	GN-GSA-MW-3	08/16/2022	<0.000508	<8.1e-005	0.025	<0.000406	<6.8e-005	0.000408 J	<6.8e-005	<0.06
Downgradient	GN-GSA-MW-1	08/18/2022	<0.000508	0.00199	2.23	<0.000406	<6.8e-005	<0.000203	<6.8e-005	0.327
Downgradient	GN-GSA-MW-10	08/17/2022	<0.000508	<8.1e-005	0.0361	<0.000406	0.000143 J	0.000266 J	<6.8e-005	<0.06
Downgradient	GN-GSA-MW-11	08/17/2022	<0.000508	0.000109 J	0.0131	<0.000406	<6.8e-005	<0.000203	0.00278	<0.06
Downgradient	GN-GSA-MW-12	08/18/2022	<0.000508	0.000189 J	0.0204	<0.000406	<6.8e-005	<0.000203	0.000296	<0.06
Downgradient	GN-GSA-MW-13	08/16/2022	<0.000508	0.000131 J	0.0383	<0.000406	<6.8e-005	0.000444 J	8.85e-005 J	0.0614 J
Downgradient	GN-GSA-MW-5	08/16/2022	<0.000508	0.00134	0.0743	<0.000406	<6.8e-005	0.000271 J	0.00389	<0.06
Downgradient	GN-GSA-MW-6	08/16/2022	<0.000508	<8.1e-005	0.0178	<0.000406	<6.8e-005	<0.000203	0.000713	<0.06
Downgradient	GN-GSA-MW-7	08/16/2022	<0.000508	0.000335	0.0175	<0.000406	<6.8e-005	0.0004 J	0.000415	0.112 J
Downgradient	GN-GSA-MW-8	08/16/2022	<0.000508	0.00116	0.0275	<0.000406	<6.8e-005	0.000437 J	0.000133 J	0.0979 J
Downgradient	GN-GSA-MW-9	08/17/2022	<0.000508	8.55e-005 J	0.0237	<0.000406	<6.8e-005	<0.000203	0.000132 J	<0.06

Notes:

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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. NC = value not detected with alkalinity calculation

## Table 7. Second Semi-Annual Monitoring Event

### Analytical Results Summary Plant Gaston Gypsum Storage Area 08/16/2022 - 08/18/2022

EPA Appendix IV Set									
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L	Combined Radium 226 + 228 pCi/L
Upgradient	GN-GSA-MW-14S	08/16/2022	<6.8e-005	<0.007105	<0.0003	0.000334	<0.000508	<6.8e-005	0.753 U
Upgradient	GN-GSA-MW-15	08/16/2022	0.000115 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	0.703 U
Upgradient	GN-GSA-MW-2	08/16/2022	<6.8e-005	<0.007105	<0.0003	0.00037	<0.000508	<6.8e-005	0.346 U
Upgradient	GN-GSA-MW-3	08/16/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.000556 J	<6.8e-005	0.877 U
Downgradient	GN-GSA-MW-1	08/18/2022	<6.8e-005	0.00965 J	<0.0003	0.00295	<0.000508	<6.8e-005	0.975
Downgradient	GN-GSA-MW-10	08/17/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	0.934 U
Downgradient	GN-GSA-MW-11	08/17/2022	7.84e-005 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	0.33 U
Downgradient	GN-GSA-MW-12	08/18/2022	<6.8e-005	<0.007105	<0.0003	0.000207	<0.000508	<6.8e-005	0.607 U
Downgradient	GN-GSA-MW-13	08/16/2022	<6.8e-005	<0.007105	<0.0003	0.000189 J	<0.000508	<6.8e-005	0.98
Downgradient	GN-GSA-MW-5	08/16/2022	<6.8e-005	<0.007105	<0.0003	0.000131 J	<0.000508	<6.8e-005	0.734 U
Downgradient	GN-GSA-MW-6	08/16/2022	0.000318	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	1.06 U
Downgradient	GN-GSA-MW-7	08/16/2022	<6.8e-005	<0.007105	<0.0003	0.000232	<0.000508	<6.8e-005	0.537 U
Downgradient	GN-GSA-MW-8	08/16/2022	<6.8e-005	<0.007105	<0.0003	0.00356	<0.000508	<6.8e-005	0.78 U
Downgradient	GN-GSA-MW-9	08/17/2022	<6.8e-005	<0.007105	<0.0003	0.000338	<0.000508	<6.8e-005	1.25

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" 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. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. NC = value not detected with alkalinity calculation

## Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary  
Plant Gaston Gypsum Storage Area  
08/16/2022 - 08/18/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Nitrate Nitrite mg/L as N	Carbon, Total Organic mg/L	Chloride mg/L	Sulfate mg/L	Aluminum mg/L	Calcium mg/L	Iron Total mg/L	Sulfide mg/L
Upgradient	GN-GSA-MW-14S	08/16/2022	0.201 J	1.05 J	2.54	4.71	0.0207	52.1	0.0475	0
Upgradient	GN-GSA-MW-15	08/16/2022	0.228 J	<1	2.27	3.73	0.0391	4.13	0.326	0
Upgradient	GN-GSA-MW-2	08/16/2022	0.421	2.97	3.66	8.31	<0.00609	96.3	<0.00812	0
Upgradient	GN-GSA-MW-3	08/16/2022	<0.2	<1	3.08	7.79	0.0075 J	50.5	<0.00812	0
Downgradient	GN-GSA-MW-1	08/18/2022	<0.2	<1	2.3	4.84	<0.00609	53.5	0.176	0
Downgradient	GN-GSA-MW-10	08/17/2022	<0.2	3.9	3.11	2.24	<0.00609	118	<0.00812	0
Downgradient	GN-GSA-MW-11	08/17/2022	<0.2	1.16 J	19.5	2.29	0.00627 J	12.6	0.0213 J	0
Downgradient	GN-GSA-MW-12	08/18/2022	<0.2	<1	3.53	6.66	<0.00609	110	<0.00812	0
Downgradient	GN-GSA-MW-13	08/16/2022	0.414	<1	3.47	8.54	<0.00609	107	<0.00812	0
Downgradient	GN-GSA-MW-5	08/16/2022	<0.2	1.28 J	9.72	142	<0.00609	94.8	5.3	0
Downgradient	GN-GSA-MW-6	08/16/2022	0.215 J	<1	3.64	<0.6	0.0895	0.516	0.0166 J	0
Downgradient	GN-GSA-MW-7	08/16/2022	<0.2	3.4	3.8	6.63	<0.00609	82.2	0.0532	0
Downgradient	GN-GSA-MW-8	08/16/2022	<0.2	<1	1.69	5.27	<0.00609	58.4	0.358	0
Downgradient	GN-GSA-MW-9	08/17/2022	<0.2	3.08	2.13	4.58	0.0163	67.7	0.0334 J	0

Notes:

- "J" indicates the result was detected above the MDL but below the PQL
- "<" indicates the result was not detected above the MDL and is considered a non-detect.
- 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.
- DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
- mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
- NC = value not detected with alkalinity calculation

## Table 7. Second Semi-Annual Monitoring Event

### Analytical Results Summary Plant Gaston Gypsum Storage Area 08/16/2022 - 08/18/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Potassium mg/L	Magnesium Total mg/L	Manganese Total mg/L	Sodium mg/L	Silica mg/L	Silicon mg/L	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L
Upgradient	GN-GSA-MW-14S	08/16/2022	0.841	8.81	0.0179	12.9	10.1	4.7	169	2.26
Upgradient	GN-GSA-MW-15	08/16/2022	0.242 J	0.292 J	0.0655	1.02	9.24	4.32	4.72	NC
Upgradient	GN-GSA-MW-2	08/16/2022	0.623	20.7	0.000594 J	2.3	11.6	5.43	268	1.9
Upgradient	GN-GSA-MW-3	08/16/2022	7.95	2.45	0.00375	4.41	7.51	3.51	143	1.92
Downgradient	GN-GSA-MW-1	08/18/2022	1.14	20.9	0.00602	7.86	19.6	9.14	203	2.27
Downgradient	GN-GSA-MW-10	08/17/2022	<0.169505	1.63	0.018	1.89	9.01	4.21	253	1.27
Downgradient	GN-GSA-MW-11	08/17/2022	0.271 J	2.25	0.192	6.54	7.43	3.47	27	NC
Downgradient	GN-GSA-MW-12	08/18/2022	0.272 J	7.67	0.159	2.3	7.55	3.53	217	0.89
Downgradient	GN-GSA-MW-13	08/16/2022	0.933	10.7	0.00157	3.07	9.37	4.38	249	4.09
Downgradient	GN-GSA-MW-5	08/16/2022	0.337 J	18.8	0.998	22.1	10.2	4.76	172	1.46
Downgradient	GN-GSA-MW-6	08/16/2022	0.178 J	0.375 J	0.00822	2.57	8.86	4.14	3.56	NC
Downgradient	GN-GSA-MW-7	08/16/2022	0.645	9.09	0.196	5.75	6.87	3.21	199	NC
Downgradient	GN-GSA-MW-8	08/16/2022	1.39	10.5	0.106	1.31	8.32	3.89	170	2.13
Downgradient	GN-GSA-MW-9	08/17/2022	0.748	7.47	0.0246	2.64	8.99	4.2	164	2.2

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" 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. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. NC = value not detected with alkalinity calculation

### Analytical Results Summary Plant Gaston Gypsum Storage Area 08/16/2022 - 08/18/2022

General Chemistry and MNA Parameters			
Hydraulic Location	Well	Sample Date	Bicarbonate Alkalinity as CaCO <sub>3</sub> mg/L
Upgradient	GN-GSA-MW-14S	08/16/2022	167
Upgradient	GN-GSA-MW-15	08/16/2022	4.71
Upgradient	GN-GSA-MW-2	08/16/2022	266
Upgradient	GN-GSA-MW-3	08/16/2022	141
Downgradient	GN-GSA-MW-1	08/18/2022	201
Downgradient	GN-GSA-MW-10	08/17/2022	252
Downgradient	GN-GSA-MW-11	08/17/2022	26.9
Downgradient	GN-GSA-MW-12	08/18/2022	216
Downgradient	GN-GSA-MW-13	08/16/2022	245
Downgradient	GN-GSA-MW-5	08/16/2022	170
Downgradient	GN-GSA-MW-6	08/16/2022	3.56
Downgradient	GN-GSA-MW-7	08/16/2022	199
Downgradient	GN-GSA-MW-8	08/16/2022	168
Downgradient	GN-GSA-MW-9	08/17/2022	162

**Notes:**

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" 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. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. NC = value not detected with alkalinity calculation

# Appendix A



**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-2																			
		03/23/2016	05/10/2016	07/05/2016	09/06/2016	11/08/2016	02/21/2017	05/31/2017	07/05/2017	09/05/2017	02/05/2018	06/12/2018	10/22/2018	05/20/2019	09/04/2019	02/12/2020	09/09/2020	04/13/2021	10/04/2021	04/12/2022	8/16/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Calcium	mg/L	75.3	75.7	78.8	84.3	87.2	80	75.2	77.2	77.5	--	78.9	96.9	87.3	89.8	81.4	80.9	77.5	85	79.8	96.300003
Chloride	mg/L	3.6	4.18	3.12	3.21	3.33	4.6	3.8	3.4	4.4	--	3.4	3.6	3.53	3.56	3.66	3.44	3.55	3.59	3.23	3.66
Fluoride	mg/L	0.022 J	0.068 J	0.052 J	0.038 J	<0.01	0.1	0.1	<0.032	<0.032	0.04 J	<0.032	<0.032	<0.05	<0.05	<0.05	0.0644 J	<0.06	0.0664 J	<0.06	0.0865
Sulfate	mg/L	6.48	11.1	6.7	6.85	7.3	7.7	5.3	6.4	6.1	--	7.2	8.3	7.52	9.25	10.7	7.77	7.44	6.86	8.36	8.31
TDS	mg/L	272	283	294	295	310	280	287	287	280	--	284	278	286	297	276	272	283	287	271	280
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	0.000616 J	<0.0006	0.00073 J	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00117 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000123 J	0.000168 J	0.000102 J	0.000091 J
Barium	mg/L	0.0389	0.0552	0.0329	0.0297	0.0313	0.0396	0.0301	0.0274	--	0.0325	0.0286	0.0324	0.0256	0.0325	0.0372	0.03	0.0371	0.0353	0.034	0.0315
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000517 J	0.000605 J	0.000471 J	0.000493 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226+228	pCi/L	3 U	0.24 U	0.225 U	0.0553 U	0.614 U	1.6	0.0999 U	0.241 U	--	0.206 U	0.592	0.351 U	0.435	0.347 U	0.419 U	0.611 U	0.258 U	1.1 U	--	0.346 U
Fluoride	mg/L	0.022 J	0.068 J	0.052 J	0.038 J	<0.01	0.1	0.1	<0.032	<0.032	0.04 J	<0.032	<0.032	<0.05	<0.05	<0.05	0.0644 J	<0.06	0.0664 J	<0.06	0.0865 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000307	0.000338	0.000259	0.000371
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-3																			
		03/23/2016	05/10/2016	07/06/2016	09/07/2016	11/08/2016	02/20/2017	05/31/2017	07/05/2017	09/05/2017	02/06/2018	06/12/2018	10/23/2018	05/22/2019	09/04/2019	02/12/2020	09/09/2020	04/13/2021	10/04/2021	04/12/2022	8/16/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Calcium	mg/L	106	109	98.7	98.6	99.7	93.4	84.1	92.6	86.1	--	76.5	68.8	53.1	76.4	89.6	63.1	57.8	43.7	55.1	50.5
Chloride	mg/L	3.67	3.34	3.08	2.95	2.92	3.3	2.9	2.6	3.5	--	3.1	2.6	2.83	2.92	2.49	2.74	2.76	2.88	2.67	3.08
Fluoride	mg/L	0.06 J	0.111 J	0.089 J	0.073 J	<0.01	0.05 J	0.06 J	0.05 J	0.06 J	0.06 J	0.05 J	0.05 J	0.0515 J	0.0594 J	0.0566 J	0.0748 J	0.069 J	0.0637 J	<0.06	<0.06
Sulfate	mg/L	32.6	27.6	23.6	22.2	20.4	14	15	11	17	--	14	12	11	10.9	9.13	8.76	7.88	8.09	7.36	7.79
TDS	mg/L	334	349	316	309	302	297	287	283	284	--	248	215	184	225	250	220	196	168	156	164
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00011 J	<6.8e-005	<8.1e-005	<8.1e-005
Barium	mg/L	0.0597	0.0622	0.0512	0.0453	0.0423	0.0306	0.0347	0.0287	--	0.0341	0.0323	0.035	0.0271	0.0358	0.0257	0.0273	0.0259	0.0232	0.0309	0.0241
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000337 J	0.000455 J	0.00026 J	0.000262 J
Cobalt	mg/L	0.00232 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226+228	pCi/L	3 U	0.94	0.878	1.45	1.48	0.755	0.91	0.154 U	--	0.111 U	0.289 U	0.879	0.643 U	2.36	0.444 U	1.02	0.652 U	1.22 U	--	0.877 U
Fluoride	mg/L	0.06 J	0.111 J	0.089 J	0.073 J	<0.01	0.05 J	0.06 J	0.05 J	0.06 J	0.06 J	0.05 J	0.05 J	0.0515 J	0.0594 J	0.0566 J	0.0748 J	0.069 J	0.0637 J	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	7.49e-005 J	<6.8e-005	<0.000102	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	0.000598 J	<0.000508	0.000556 J
Thallium	mg/L	0.000228 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-14S																			
		07/05/2016	08/23/2016	09/07/2016	11/08/2016	01/03/2017	02/21/2017	05/31/2017	07/05/2017	09/05/2017	02/06/2018	06/12/2018	10/23/2018	05/22/2019	09/04/2019	02/12/2020	09/09/2020	04/13/2021	10/04/2021	04/13/2022	8/16/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	0.0211 J	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Calcium	mg/L	50.8	51.7	48.4	50.7	55.4	48	45.4	45.7	48.5	--	45.2	44.4	47.1	47.4	57.3	46.7	48.4	48	58.9	52.1
Chloride	mg/L	3.86	4.69	4.6	4.68	5.25	4.3	4.2	3.4	4.5	--	3.6	3.4	2.89	2.88	2.4	2.49	2.56	2.5	2.42	2.54
Fluoride	mg/L	0.072 J	0.066 J	0.062 J	<0.01	<0.01	0.1	0.06 J	0.04 J	0.06 J	0.06 J	0.05 J	0.07 J	0.0601 J	0.0703 J	<0.05	0.0847 J	<0.06	0.0838 J	<0.06	<0.06
Sulfate	mg/L	11.7	13.7	12.4	12.9	14.1	6.1	8	3.8 J	6.8	--	5	5.4	5.57	6.37	3.09	5.26	3.45	3.78	2.44	4.71
TDS	mg/L	194	208	198	205	221	195	220	185	202	--	205	204	202	195	189	198	191	183	187	162
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000187 J	0.000158 J	0.000143 J	0.000148 J
Barium	mg/L	0.0375	0.0353	0.0365	0.0393	0.0373	0.0262	0.0305	0.0245	--	0.034	0.0291	0.032	0.0257	0.0303	0.0239	0.0262	0.0217	0.024	0.0217	0.0245
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000697 J	0.000653 J	0.000699 J	0.000493 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	0.000104 J
Combined Radium 226+228	pCi/L	0.385 U	0.411 U	0.88	0.791	0.412 U	0.746	0.115 U	0.152 U	--	0.308 U	0.672	0.248 U	0.24 U	2.02	0.79	0.453 U	0.788 U	0.573 U	--	0.753 U
Fluoride	mg/L	0.072 J	0.066 J	0.062 J	<0.01	<0.01	0.1	0.06 J	0.04 J	0.06 J	0.06 J	0.05 J	0.07 J	0.0601 J	0.0703 J	<0.05	0.0847 J	<0.06	0.0838 J	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000334	0.000456	0.000215	0.000422
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

**Appendix A.  
Historical Analytical Data Summary  
Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																				
		GN-GSA-MW-15																				
		07/06/2016	08/23/2016	09/07/2016	11/08/2016	01/03/2017	02/20/2017	05/31/2017	07/05/2017	09/05/2017	02/07/2018	06/12/2018	10/23/2018	05/22/2019	09/04/2019	02/12/2020	09/09/2020	04/13/2021	10/06/2021	04/12/2022	8/16/2022	
<b>Appendix III</b>																						
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		
Calcium	mg/L	10.7	7.34	7.86	8.94	9.21	8.53	7.02	8.08	7.44	--	7.37	5.94	6.34	6.07	5.62	4.73	5.17	4.62	4.52	4.13	
Chloride	mg/L	3.78	3.47	3.4	3.29	3.11	2.7	2.3	2	2.5	--	2	1.5 J	1.75	1.95	1.8	1.95	1.86	2.07	1.88	2.27	
Fluoride	mg/L	0.062 J	0.045 J	0.042 J	<0.01	<0.01	0.1	0.1	<0.032	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	
Sulfate	mg/L	5.38	4.23	3.84	3.23	3	3.1 J	2.1 J	2 J	2.2 J	--	2.3 J	<1.4	2.82	2.3	1.77	2	2.51	2.15	1.76 J	3.73	
TDS	mg/L	55.3	45.3	37.3	40.7	47.3	55.3	46.7	41.3	34.7	--	38	27.3	35.3	28	30.7	32.7	35.3	--	27.3	27.3	
<b>Appendix IV</b>																						
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000134 J	0.000319	0.000281	0.000207	
Barium	mg/L	0.014	0.00858 J	0.00994 J	0.0108	0.00989 J	0.00932 J	0.00876 J	0.00935 J	--	0.00897 J	0.0112	0.00948 J	0.00958 J	0.00964 J	0.0088 J	0.00706 J	0.00801	0.00769	0.00927	0.00715	
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000375 J	<0.000203	0.000234 J	0.000374 J	
Cobalt	mg/L	0.00313 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00046	0.000501	0.000658	0.000496	
Combined Radium 226+228	pCi/L	0.563	0.352 U	1.08	0.908	0.661	0.155 U	-0.105 U	0.372	--	0.0874 U	0.446	0.829	0.588	1.06	0.297 U	0.258 U	0.452 U	1.33	--	0.703 U	
Fluoride	mg/L	0.062 J	0.045 J	0.042 J	<0.01	<0.01	0.1	0.1	<0.032	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	0.000226	6.89e-005 J	
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	

Notes:

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


**Appendix A.  
Historical Analytical Data Summary  
Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																					
		GN-GSA-MW-1																					
		03/24/2016	05/10/2016	07/05/2016	09/06/2016	11/08/2016	02/22/2017	03/01/2017	05/31/2017	07/05/2017	09/07/2017	02/05/2018	06/12/2018	10/23/2018	05/21/2019	09/04/2019	02/12/2020	09/09/2020	04/13/2021	10/04/2021	02/08/2022	04/13/2022	8/17/2022
<b>Appendix III</b>																							
Boron	mg/L	0.0311 J	0.0334 J	0.0359 J	0.0316 J	0.0361 J	0.028 J	--	0.0297 J	0.0302 J	0.0345 J	--	0.0331 J	0.0345 J	0.0376 J	0.0363 J	0.0349 J	0.0366 J	0.0306 J	0.0343 J	0.0361 J	0.0355 J	0.1015
Calcium	mg/L	36.9	37.9	35.3	34.8	34.3	35.9	--	34.3	35.5	36.7	--	42.2	38.9	47.8	41.4	44.1	44.5	44	45.4	42.3	44.8	53.5
Chloride	mg/L	3.35	3.06	2.9	2.54	2.34	2.9	--	2.7	2.2	2.9	--	2.4	2.1	2.6	2.39	2.36	2.49	2.54	2.58	2.4	2.17	2.3
Fluoride	mg/L	0.325	0.33	0.325	0.315	0.227 J	0.34	--	0.3	0.3	0.37	0.37	0.32	0.39	0.264	0.33	0.301	0.313	0.29	0.376	0.282	0.307	0.327
Sulfate	mg/L	6.06	5.47	4.8	3.91	2.95	3.3 J	--	3.4 J	3.4 J	3.6 J	--	4.2 J	3 J	4.58	4.82	5.11	3.97	4.43	4.08	4.41	4.24	4.84
TDS	mg/L	203	204	188	188	197	165	--	244	201	196	--	221	195	244	200	219	221	237	221	207	217	214
<b>Appendix IV</b>																							
Antimony	mg/L	0.00116 J	0.000629 J	0.000718 J	0.000833 J	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.000909 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.0444	0.041	0.0333	0.0289	0.0241	0.0192	--	0.0154	0.0155	--	0.014	0.011	0.00829	0.00722	0.00534	0.0062	0.0046 J	0.00427	0.00335	0.00275	0.00248	0.00194
Barium	mg/L	1.43	1.83	1.71	1.65	1.6	1.53	--	1.66	1.66	--	1.8	2.32	2.22	2.51	1.96	2.15	2.5	2.41	1.92	2.43	2.1	2.24
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000207 J	<0.000203	<0.000203	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226+228	pCi/L	3 U	0.904	0.971	1.09	1.13	--	0.736	0.961	1.1	--	0.596	0.89	1.14	1.38	2.39	1.17	1.02	0.909 U	1.43	--	--	0.975
Fluoride	mg/L	0.325	0.33	0.325	0.315	0.227 J	0.34	--	0.3	0.3	0.37	0.37	0.32	0.39	0.264	0.33	0.301	0.313	0.29	0.376	0.282	0.307	0.327
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0101 J	0.00953 J	0.00963 J	0.0095 J	0.0099 J	0.00965 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0241	0.0239	0.0176	0.0138	0.0102	0.0102	--	0.00805 J	0.009 J	--	0.00908 J	0.00655 J	0.006 J	0.00504 J	0.00504 J	0.00448 J	0.00405 J	0.00353	0.00372	0.00348	0.0033	0.00317
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

**Appendix A.  
Historical Analytical Data Summary  
Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-5																			
		03/23/2016	05/11/2016	07/06/2016	09/06/2016	11/08/2016	02/20/2017	05/30/2017	07/05/2017	09/07/2017	02/06/2018	06/11/2018	10/22/2018	05/20/2019	09/04/2019	02/11/2020	09/08/2020	04/13/2021	10/04/2021	04/12/2022	8/16/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.022 J	--	0.0386 J	0.0456 J	0.0769 J	0.0641 J	0.0406 J	0.0425 J	0.0333 J	0.0395 J	0.0481 J	0.0379 J
Calcium	mg/L	48.1	46	52.1	49.7	54.3	51.3	50	56.9	66.5	--	62.4	60.6	58.8	57.9	76.6	83.9	79.2	81.2	94.1	94.8
Chloride	mg/L	4.84	4.19	4.67	4.23	4.51	5.8	13	17	17	--	14	14	12.9	11.9	11.2	11.7	9.78	9.45	7.35	9.72
Fluoride	mg/L	0.028 J	0.074 J	0.065 J	0.052 J	<0.01	0.1	0.04 J	<0.032	<0.032	<0.032	0.04 J	0.06 J	0.0842 J	0.0962 J	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
Sulfate	mg/L	14.1	13.5	17.1	11.2	10.9	8.8	12	19	33	--	47	40	75.6	56.3	79.7	113	108	115	145	142
TDS	mg/L	185	176	203	180	187	205	187	238	269	--	312	292	398	388	308	360	350	395	400	376
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00241 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	0.00119 J	0.00188 J	0.00259 J	0.00305 J	<0.001	<0.001	0.000587	0.000571	0.000896	0.00114
Barium	mg/L	0.0333	0.0378	0.0456	0.0378	0.039	0.0337	0.0374	0.0361	--	0.0418	0.056	0.0711	0.0671	0.0824	0.0513	0.0464	0.0478	0.0517	0.0666	0.0735
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000277 J	0.000287 J	0.000271 J
Cobalt	mg/L	0.00403 J	0.00289 J	0.00485 J	0.00281 J	0.0035 J	<0.002	<0.002	<0.002	--	0.00274 J	0.00472 J	0.0049 J	0.00489 J	0.00527	<0.002	<0.002	0.00104	0.00144	0.00215	0.00381
Combined Radium 226+228	pCi/L	3 U	0.0157 U	0.648	0.633	0.67	0.073 U	0.646	0.16 U	--	0.0645 U	0.577	1.16	-0.251 U	1.05	0.585	0.921	0.434 U	0.11 U	--	0.734 U
Fluoride	mg/L	0.028 J	0.074 J	0.065 J	0.052 J	<0.01	0.1	0.04 J	<0.032	<0.032	<0.032	0.04 J	0.06 J	0.0842 J	0.0962 J	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	9.4e-005 J	8.83e-005 J	0.000139 J	0.000102 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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


**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-6																			
		03/23/2016	05/11/2016	07/06/2016	09/06/2016	11/08/2016	02/20/2017	05/30/2017	07/05/2017	09/07/2017	02/06/2018	06/11/2018	10/22/2018	05/20/2019	09/04/2019	02/11/2020	09/08/2020	04/13/2021	10/04/2021	04/12/2022	8/16/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Calcium	mg/L	1.32	1.13	1.18	1.09	1.32	0.829	0.743	0.68	0.825	--	0.722	0.79	0.652	0.872	0.562	0.652	0.505	0.53	0.516	0.516
Chloride	mg/L	3.36	3.04	2.86	2.92	3.01	3.7	3.2	2.8	3	--	2.7	2.6	3.15	3.21	3.36	3.29	3.54	3.61	3.38	3.64
Fluoride	mg/L	<0.01	0.055 J	0.047 J	0.036 J	<0.01	0.1	0.1	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Sulfate	mg/L	1.89	1.79	1.3	1.14	0.622 J	5	5	<1.4	<1.4	--	<1.4	<1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.6	2
TDS	mg/L	27.3	--	--	--	--	30	--	26	--	--	--	--	27.3	--	--	--	26	32	--	25
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00171 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.88e-005 J	7.81e-005 J	<8.1e-005	<8.1e-005
Barium	mg/L	0.0149	0.0168	0.0166	0.0144	0.015	0.0126	0.0146	0.0143	--	0.0156	0.0155	0.0185	0.0156	0.0176	0.0175	0.0159	0.0175	0.0161	0.0157	0.0194
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000257 J	0.000245 J	0.000221 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000682	0.000651	0.000665	0.000793
Combined Radium 226+228	pCi/L	3 U	0.222 U	0.375 U	0.607 U	1.36	0.524	-0.1 U	0.376 U	--	-0.14 U	0.436	1.07	0.498	0.608	0.743	-0.109 U	0.611 U	1.7	--	1.06 U
Fluoride	mg/L	<0.01	0.055 J	0.047 J	0.036 J	<0.01	0.1	0.1	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000305	0.000314	0.000396	0.000406
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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


**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-7																			
		03/23/2016	05/11/2016	07/06/2016	09/06/2016	11/08/2016	02/20/2017	05/31/2017	07/05/2017	09/07/2017	02/06/2018	06/11/2018	10/22/2018	05/20/2019	09/04/2019	02/11/2020	09/09/2020	04/13/2021	10/04/2021	04/12/2022	8/16/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Calcium	mg/L	59.1	58.9	60.8	62.2	63.9	69.6	63	64.6	70.5	--	63.5	70.3	72.5	72	71.2	66.7	64.1	70.4	63.6	82.2
Chloride	mg/L	3.28	3.08	2.96	2.97	3.22	4	4.3	3.4	4	--	3.6	3.7	3.25	4.31	3.69	3.34	3.64	3.48	3.29	3.8
Fluoride	mg/L	0.063 J	0.105 J	0.094 J	0.08 J	<0.01	0.09 J	0.08 J	0.08 J	0.09 J	0.08 J	0.09 J	0.1	0.0919 J	0.07 J	0.0912 J	0.118	0.129	0.12	0.0724 J	0.1015
Sulfate	mg/L	13.8	11.9	11.1	10.6	12.1	9.7	11	8.3	8.6	--	7.5	8.8	6.85	10.1	8.5	7.13	6.37	6.02	5.75	6.63
TDS	mg/L	202	207	202	204	212	251	234	229	225	--	210	209	218	233	241	234	220	232	214	212
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00123 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.001 J	<0.001	0.000469	0.000286	0.000492	0.000386
Barium	mg/L	0.02	0.0221	0.0227	0.0204	0.0208	0.0193	0.0201	0.0181	--	0.0183	0.0196	0.0228	0.0163	0.0256	0.0194	0.0161	0.016	0.0181	0.0161	0.0199
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000361 J	0.000563 J	0.000222 J	0.000405 J
Cobalt	mg/L	0.00656 J	0.00505 J	0.00515 J	0.0037 J	0.00375 J	0.00263 J	0.00287 J	<0.002	--	<0.002	<0.002	<0.002	<0.002	0.00217 J	<0.002	<0.002	0.00077	0.000326	0.000714	0.000415
Combined Radium 226+228	pCi/L	3 U	0.329 U	-0.129 U	0.858	0.49 U	0.506	0.272 U	0.216 U	--	0.168 U	0.199 U	1.03	0.465	1.28	0.513 U	0.382 U	0.492 U	0.144 U	--	0.537 U
Fluoride	mg/L	0.063 J	0.105 J	0.094 J	0.08 J	<0.01	0.09 J	0.08 J	0.08 J	0.09 J	0.08 J	0.09 J	0.1	0.0919 J	0.07 J	0.0912 J	0.118	0.129	0.12	0.0724 J	0.112 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	0.00229 J	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	0.0001 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000276	0.000248	0.000282	0.000304
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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




**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-8																			
		03/24/2016	05/11/2016	07/06/2016	09/06/2016	11/08/2016	02/20/2017	05/30/2017	07/05/2017	09/07/2017	02/06/2018	06/12/2018	10/22/2018	05/21/2019	09/03/2019	02/12/2020	09/09/2020	04/13/2021	10/04/2021	04/12/2022	8/16/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Calcium	mg/L	57.4	57	56.7	57.3	59.4	57.7	52.5	52.7	58.4	--	53.7	55.4	55.7	57.4	55.7	55.3	52.2	55.1	54.4	58.4
Chloride	mg/L	1.73	1.68	1.68	1.7	2.03	2.3	2.2	1.6 J	2.4	--	1.9 J	<1.4	1.51	1.64	1.64	1.61	1.64	1.76	1.54	1.69
Fluoride	mg/L	0.132 J	0.176 J	0.167 J	0.153 J	0.043 J	0.15	0.14	0.13	0.13	0.15	0.13	0.15	0.109	0.123	0.108	0.14	0.119	0.134	0.0621 J	0.1015
Sulfate	mg/L	2.42	2.16	1.7	1.31	1.4	2 J	1.6 J	1.9 J	2.1 J	--	2.7 J	2.2 J	3.39	4.15	4.31	3.67	4.49	5.05	3.13	5.27
TDS	mg/L	179	195	192	193	198	195	184	194	193	--	186	184	185	184	182	192	186	203	176	162
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00106 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.00112 J	<0.001	0.00124 J	0.00137 J	0.00162 J	0.00127 J	0.00129 J	0.00116 J	--	0.00131 J	0.00115 J	0.0015 J	0.00128 J	0.00118 J	0.00133 J	0.00126 J	0.00134	0.00135	0.00124	0.00112
Barium	mg/L	0.0249	0.0291	0.0317	0.0312	0.0349	0.0264	0.027	0.0245	--	0.0248	0.0299	0.0314	0.0264	0.0314	0.0257	0.026	0.0262	0.0265	0.0239	0.0267
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000291 J	0.000365 J	0.000263 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000123 J	0.000137 J	7.46e-005 J	0.000142 J
Combined Radium 226+228	pCi/L	3 U	0.202 U	0.291 U	-0.0526 U	0.364 U	0.174 U	0.368 U	0.224 U	--	-0.011 U	0.324 U	0.748	0.21 U	0.983	-0.0587 U	0.287 U	0.391 U	0.794 U	--	0.78 U
Fluoride	mg/L	0.132 J	0.176 J	0.167 J	0.153 J	0.043 J	0.15	0.14	0.13	0.13	0.15	0.13	0.15	0.109	0.123	0.108	0.14	0.119	0.134	0.0621 J	0.0979 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00317 J	0.00424 J	0.00489 J	0.00466 J	0.00422 J	0.00422 J	0.00344 J	0.00369 J	--	0.00331 J	0.00325 J	0.00359 J	0.00379 J	0.00437 J	0.00322 J	0.00418 J	0.00318	0.00345	0.00347	0.00344
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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



**Appendix A.  
Historical Analytical Data Summary  
Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-9																			
		03/23/2016	05/11/2016	07/06/2016	09/07/2016	11/08/2016	02/21/2017	05/30/2017	07/05/2017	09/07/2017	02/06/2018	06/12/2018	10/22/2018	05/21/2019	09/03/2019	02/12/2020	09/08/2020	04/13/2021	10/05/2021	04/12/2022	8/17/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Calcium	mg/L	45.9	49.4	56	53.8	64.3	45.6	45.8	36.4	53.5	--	47.6	52.4	51.6	60.3	45.3	57.5	43.5	54.6	46.3	67.699997
Chloride	mg/L	2.26	2.26	2.28	2.32	2.26	2.9	2.9	2.7	2.8	--	2.6	2	2.12	2.26	2.24	2.06	2.14	2.16	1.94	2.13
Fluoride	mg/L	0.035 J	0.08 J	0.072 J	0.057 J	<0.01	0.1	0.04 J	<0.032	0.04 J	0.04 J	0.04 J	0.05 J	0.0526 J	0.0554 J	<0.05	0.097 J	0.0602 J	<0.06	<0.06	<0.06
Sulfate	mg/L	5.54	5.66	5.62	5.31	4.42	5.3	5.2	4.4 J	5.9	--	5.7	5.1	6.07	6.53	5.67	5.42	4.65	4.08	4.05	4.58
TDS	mg/L	149	179	183	173	207	153	158	138	171	--	167	177	176	189	153	187	163	170	155	179
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00112 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	0.00101 J	0.00121 J	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000237	0.000144 J	0.000107 J	8.55e-005 J
Barium	mg/L	0.0252	0.0327	0.0342	0.0292	0.0281	0.0235	0.0214	0.0213	--	0.0232	0.0259	0.0265	0.0249	0.0271	0.0214	0.0234	0.0226	0.0234	0.0208	0.0231
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000276 J	0.000208 J	0.00022 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	8.16e-005 J	0.000406	<6.8e-005	0.000115 J
Combined Radium 226+228	pCi/L	3 U	0.903 U	0.19 U	0.458 U	1.25	0.657	0.373 U	0.415	--	0.328 U	0.141 U	0.21 U	0.289 U	0.994	0.377 U	1.07	0.592 U	0.2 U	--	1.25
Fluoride	mg/L	0.035 J	0.08 J	0.072 J	0.057 J	<0.01	0.1	0.04 J	<0.032	0.04 J	0.04 J	0.04 J	0.05 J	0.0526 J	0.0554 J	<0.05	0.097 J	0.0602 J	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000207	0.000319	0.000253	0.000346
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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


**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-10																			
		03/24/2016	05/11/2016	07/06/2016	09/06/2016	11/09/2016	02/21/2017	05/31/2017	07/05/2017	09/07/2017	02/06/2018	06/12/2018	10/24/2018	05/21/2019	09/03/2019	02/12/2020	09/08/2020	04/13/2021	10/05/2021	04/13/2022	8/17/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	90.3	91.1	90.7	94.5	92.9	93.1	86.6	91.5	99	--	101	104	101	102	99.2	99.9	97.1	108	95.7	118
Chloride	mg/L	2.78	2.62	2.53	2.51	2.67	3.4	3.6	2.7	3.9	--	2.8	2.9	2.98	2.84	2.86	2.8	3.07	3.04	2.78	3.11
Fluoride	mg/L	0.02 J	0.062 J	0.051 J	0.037 J	<0.01	0.1	0.1	<0.032	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.05	0.0617 J	<0.06	<0.06	<0.06	<0.06
Sulfate	mg/L	1.62	2.15	1.89	1.53	1.69	2.2 J	1.7 J	<1.4	1.7 J	--	1.8 J	<1.4	1.72	1.73	1.65	1.62	1.68	1.8	1.66 J	2.24
TDS	mg/L	2240	257	256	245	258	243	252	257	259	--	266	265	274	260	259	275	273	293	273	265
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.000916 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	8.71e-005 J	7.29e-005 J	0.000112 J	<8.1e-005
Barium	mg/L	0.0339	0.0375	0.0374	0.0331	0.0367	0.0335	0.0314	0.0321	--	0.0337	0.0342	0.0393	0.0323	0.0377	0.0344	0.0331	0.0373	0.0359	0.033	0.035
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	8.16e-005 J	<6.8e-005	7.2e-005 J
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000234 J	<0.000203	0.000266 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226+228	pCi/L	3 U	0.197 U	<0.0714 U	0.59 U	0.621 U	1.01	0.191 U	0.166 U	--	0.275 U	0.218 U	1.4	5.12 U	0.793	0.13 U	0.65 U	0.531 U	0.269 U	--	0.934 U
Fluoride	mg/L	0.02 J	0.062 J	0.051 J	0.037 J	<0.01	0.1	0.1	<0.032	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.05	0.0617 J	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-11																			
		03/23/2016	05/11/2016	07/06/2016	09/07/2016	11/09/2016	02/21/2017	05/31/2017	07/05/2017	09/07/2017	02/06/2018	06/12/2018	10/24/2018	05/21/2019	09/03/2019	02/12/2020	09/09/2020	04/13/2021	10/05/2021	04/13/2022	8/17/2022
<b>Appendix III</b>																					
Boron	mg/L	0.0309 J	0.0306 J	0.0307 J	0.0319 J	0.0362 J	0.0295 J	0.0312 J	0.0315 J	0.0408 J	--	0.034 J	0.0416 J	0.0413 J	0.0452 J	0.043 J	0.044 J	0.0422 J	0.0472 J	0.0571 J	0.0528 J
Calcium	mg/L	14.8	11.5	10.4	9.73	8.07	13.2	8.56	11.9	9.2	--	11.5	7.73	11.7	8.9	13.1	9.3	12.3	13.8	15	12.6
Chloride	mg/L	2.64	3.02	4.01	4.51	3.74	4.1	5.3	4.6	6.5	--	8.8	7.2	10.4	7.1	7.16	6.27	9.8	13.8	19.6	19.5
Fluoride	mg/L	0.02 J	0.063 J	0.053 J	0.041 J	<0.01	0.1	0.1	<0.032	0.04 J	<0.032	<0.032	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	0.125
Sulfate	mg/L	7.59	6.6	11.8	14.9	4.5	5.7	5.6	4.6 J	6.2	--	3.5 J	2.4 J	3.55	2.83	3.89	3.01	2.77	2.86	2.73	2.29
TDS	mg/L	56.7	54.7	76	96	57.3	76.7	75.3	80	105	--	72	68	66	51.3	66	59.3	66	92.7	84	76
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.35e-005 J	0.000111 J	8.77e-005 J	0.000109 J
Barium	mg/L	0.00756 J	0.00769 J	0.00975 J	0.0101	0.00934 J	0.00713 J	0.00552 J	0.00664 J	--	0.00614 J	0.00637 J	0.00522 J	0.0056 J	0.00656 J	0.00444 J	0.00545 J	0.00636	0.00871	0.0162	0.0127
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000303 J	<0.000203	<0.000203
Cobalt	mg/L	0.00454 J	0.00407 J	0.00654 J	0.00737 J	0.00732 J	0.00315 J	0.0023 J	0.00303 J	--	0.00324 J	0.00251 J	0.00286 J	0.00245 J	0.00298 J	<0.002	0.00256 J	0.00212	0.00217	0.00333	0.00281
Combined Radium 226+228	pCi/L	3 U	0.0833 U	0.0827 U	2.13	0.419 U	1.19	0.215 U	0.289 U	--	0.183 U	0.569	0.898	0.0995 U	3.47	0.0433 U	0.798	0.589 U	0.524 U	--	0.33 U
Fluoride	mg/L	0.02 J	0.063 J	0.053 J	0.041 J	<0.01	0.1	0.1	<0.032	0.04 J	<0.032	<0.032	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	0.00011 J	0.000105 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

**Appendix A.  
Historical Analytical Data Summary  
Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-12																			
		03/23/2016	05/10/2016	07/06/2016	09/06/2016	11/09/2016	02/21/2017	05/31/2017	07/05/2017	09/07/2017	02/05/2018	06/12/2018	10/23/2018	05/21/2019	09/04/2019	02/12/2020	09/09/2020	04/13/2021	10/05/2021	04/13/2022	8/18/2022
<b>Appendix III</b>																					
Boron	mg/L	0.0387 J	0.0384 J	0.029 J	0.0278 J	0.0331 J	0.0323 J	0.0316 J	0.0318 J	0.0338 J	--	0.0305 J	0.0347 J	<-0.03	<-0.03	<-0.03	<-0.03	<-0.03	<-0.03	<-0.03	0.1015
Calcium	mg/L	70.2	65.6	58.2	62.3	62.7	69.9	66.5	66.9	72.9	--	69.9	64.3	77.9	74.2	77.8	77	81.6	87.9	81.9	110
Chloride	mg/L	4.43	3.38	2.62	2.65	2.55	4.7	4.1	3.2	3.5	--	3.1	2.1	3.02	2.73	4.21	2.8	3.97	3.69	3.76	3.53
Fluoride	mg/L	0.058 J	0.095 J	0.069 J	0.055 J	<-0.01	0.05 J	0.06 J	0.05 J	0.06 J	0.08 J	0.06 J	0.06 J	0.0649 J	0.0547 J	0.0586 J	0.068 J	<-0.06	<-0.06	<-0.06	<-0.06
Sulfate	mg/L	16.2	12.1	7.7	6.97	5.77	12	8.7	7.7	7	--	8.7	4.8 J	7.81	6.25	13.1	5.85	8.86	8.02	8.25	6.66
TDS	mg/L	237	226	191	200	190	264	242	231	225	--	230	201	231	217	256	230	260	255	250	252
<b>Appendix IV</b>																					
Antimony	mg/L	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	--	<-0.0006	<-0.0006	<-0.0008	0.000813 J	<-0.0008	<-0.0008	<-0.0008	<-0.000507	<-0.000508	<-0.000508	<-0.000508
Arsenic	mg/L	0.0013 J	0.00107 J	0.00113 J	0.00169 J	0.00168 J	<-0.001	0.00102 J	0.00117 J	--	0.00127 J	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	0.00033	0.000232	0.00021	0.000136 J
Barium	mg/L	0.0224	0.0232	0.0199	0.0195	0.017	0.0214	0.0223	0.022	--	0.0254	0.023	0.0176	0.0214	0.0205	0.024	0.0182	0.0234	0.0212	0.0227	0.0214
Beryllium	mg/L	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	--	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.0006	<-0.000406	<-0.000406	<-0.000406	<-0.000406
Cadmium	mg/L	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	--	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-6.8e-005	<-6.8e-005	<-6.8e-005
Chromium	mg/L	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	--	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.000203	0.00029 J	0.00021 J	<-0.000203
Cobalt	mg/L	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	--	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	0.000218	0.000417	0.000155 J	0.000321
Combined Radium 226+228	pCi/L	3 U	0.0311 U	0.359 U	1.03 U	1.22	0.0581 U	0.186 U	0.245 U	--	0.321 U	0.321 U	0.723	0.376 U	0.534	0.836	1.88	0.592 U	1.42	--	0.607 U
Fluoride	mg/L	0.058 J	0.095 J	0.069 J	0.055 J	<-0.01	0.05 J	0.06 J	0.05 J	0.06 J	0.08 J	0.06 J	0.06 J	0.0649 J	0.0547 J	0.0586 J	0.068 J	<-0.06	<-0.06	<-0.06	<-0.06
Lead	mg/L	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	--	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	<-0.001	<-6.8e-005	<-6.8e-005	<-6.8e-005	<-6.8e-005
Lithium	mg/L	<-0.01	<-0.01	<-0.01	<-0.01	<-0.01	<-0.01	<-0.01	<-0.01	--	<-0.01	<-0.01	<-0.01	<-0.01	<-0.01	<-0.01	<-0.01	<-0.007105	<-0.007105	<-0.007105	<-0.007105
Mercury	mg/L	<-0.00025	<-0.00025	<-0.00025	<-0.00025	<-0.00025	<-0.00025	<-0.00025	<-0.00025	--	<-0.00025	<-0.00025	<-0.00025	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-0.0003	<-0.0003
Molybdenum	mg/L	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	--	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	0.000298	0.000325	0.00031	0.000254
Selenium	mg/L	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	--	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.002	<-0.000507	<-0.000508	<-0.000508	<-0.000508
Thallium	mg/L	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	--	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-0.0002	<-6.8e-005	<-6.8e-005	<-6.8e-005	<-6.8e-005

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


**Appendix A.**  
**Historical Analytical Data Summary**  
**Plant Gaston Gypsum Pond**



Analyte	Units	GROUNDWATER MONITORING WELL																			
		GN-GSA-MW-13																			
		03/24/2016	05/10/2016	07/06/2016	09/06/2016	11/08/2016	02/22/2017	05/31/2017	07/05/2017	09/07/2017	02/05/2018	06/12/2018	10/23/2018	05/21/2019	09/04/2019	02/12/2020	09/09/2020	04/13/2021	10/04/2021	04/13/2022	8/16/2022
<b>Appendix III</b>																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.1015
Calcium	mg/L	79.9	77.6	72	81.6	83.8	86.4	84.1	89.5	93.2	--	101	97.6	106	93.7	93.1	88.7	89.8	92.2	91.8	107
Chloride	mg/L	3.16	3.02	3.1	3.31	3.32	4.8	4	3.6	4.5	--	3.5	3.5	3.3	3.33	4.1	3.4	3.56	3.37	3.01	3.47
Fluoride	mg/L	0.039 J	0.085 J	0.075 J	0.058 J	<0.01	0.04 J	0.04 J	0.04 J	0.05 J	0.04 J	0.04 J	0.05 J	0.0555 J	0.0555 J	<0.05	0.0655 J	0.0633 J	0.0748 J	<0.06	0.0614 J
Sulfate	mg/L	7.64	6.79	7.59	9.56	8.87	10	8	8.2	8.3	--	8.3	6.7	8.29	8.18	9.06	7.89	8.38	7.18	7.27	8.54
TDS	mg/L	244	247	247	264	173	260	277	296	294	--	282	279	286	271	282	271	286	277	266	264
<b>Appendix IV</b>																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00127 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.00157 J	0.00182 J	0.00152 J	0.00197 J	<0.001	0.0011 J	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.00348 J	<0.001	<0.001	<0.001	0.000189 J	0.000126 J	0.000126 J	0.00012 J
Barium	mg/L	0.0432	0.0609	0.0542	0.0544	0.0491	0.0537	0.0452	0.0461	--	0.0469	0.0469	0.0457	0.0697	0.0455	0.0419	0.039	0.0403	0.0374	0.0338	0.0383
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.002 J	<0.002	<0.002	<0.002	0.000518 J	0.000597 J	0.000523 J	0.000436 J
Cobalt	mg/L	0.00662 J	0.00549 J	0.00537 J	0.00568 J	0.00388 J	0.00412 J	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.0578	<0.002	<0.002	<0.002	0.000158 J	8.7e-005 J	7.16e-005 J	9.76e-005 J
Combined Radium 226+228	pCi/L	3 U	-0.0573 U	0.607	0.47 U	0.177 U	0.783	0.153 U	0.444	--	-0.0362 U	-0.0382 U	1.04	0.503 U	3.92	0.799	0.27 U	0.667 U	0.231 U	--	0.98
Fluoride	mg/L	0.039 J	0.085 J	0.075 J	0.058 J	<0.01	0.04 J	0.04 J	0.04 J	0.05 J	0.04 J	0.04 J	0.05 J	0.0595 J	0.0555 J	<0.05	0.0655 J	0.0633 J	0.0748 J	<0.06	0.0614 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.00228 J	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000175 J	0.000162 J	0.000164 J	0.000165 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

# Appendix B

**Appendix B.**  
**Historical Groundwater Elevations Summary**  
**Plant Gaston Gypsum Pond**

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
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
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
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
GN-GSA-PZ-4	427.71	--	--	--	--	--	--	--	--	--	--	--
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
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
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
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
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
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
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
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
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
GN-GSA-MW-14S	424.06	--	--	--	400.16	398.80	397.63	401.59	400.86	406.18	400.84	400.00
GN-GSA-MW-15	426.19	--	--	--	402.95	401.21	399.07	407.15	404.90	414.83	404.61	406.76

Well Name	Top of Casing Elevation	Groundwater Elevation (ft. AMSL)									
		4/16/2018	10/1/2018	5/20/2019	9/3/2019	2/11/2020	9/8/2020	4/12/2021	10/4/2021	4/11/2022	8/15/2022
GN-GSA-MW-1	426.73	398.84	395.23	398.50	394.93	402.13	395.97	400.84	398.49	401.02	397.87
GN-GSA-MW-2	421.19	401.37	397.59	400.52	397.66	410.56	398.01	404.97	400.61	408.72	400.27
GN-GSA-MW-3	425.30	405.13	399.85	405.62	400.51	410.32	401.64	409.03	404.55	413.82	404.37
GN-GSA-PZ-4	427.71	--	--	414.22	410.95	424.34	411.95	421.49	414.04	423.62	414.03
GN-GSA-MW-5	429.49	399.53	396.02	399.55	396.04	403.27	397.52	402.00	399.23	402.26	398.28
GN-GSA-MW-6	427.64	398.84	395.94	398.84	395.88	401.96	397.27	400.92	398.72	400.98	397.92
GN-GSA-MW-7	423.79	396.93	394.89	397.16	395.37	399.91	396.37	398.23	397.22	398.05	396.33
GN-GSA-MW-8	417.58	396.07	394.08	396.10	395.62	401.36	395.70	397.12	396.26	397.05	395.85
GN-GSA-MW-9	417.68	396.53	394.25	396.61	395.39	402.97	395.82	399.68	396.74	399.34	396.12
GN-GSA-MW-10	418.04	396.24	394.02	396.26	395.37	400.76	395.74	397.34	396.61	397.32	395.93
GN-GSA-MW-11	417.69	396.09	394.39	396.01	395.34	400.66	395.47	396.78	397.48	396.87	395.61
GN-GSA-MW-12	417.10	396.87	394.95	397.04	395.30	400.44	395.90	398.44	397.19	398.49	396.39
GN-GSA-MW-13	422.74	398.52	394.78	398.11	394.36	402.74	395.55	400.46	398.26	400.50	397.43
GN-GSA-MW-14S	424.06	402.34	398.14	402.39	398.44	411.16	399.33	405.73	401.55	410.48	401.22
GN-GSA-MW-15	426.19	407.66	400.17	406.92	400.43	418.13	402.03	414.67	406.04	417.18	405.47

Notes:

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



# Appendix C

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**

### **2022 Compliance Event 1**

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

Field quality control procedures were performed as follows:

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



**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-3	Conductivity	4/12/2022 15:33	235.67	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:33	1.73	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:33	17.31	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:33	139.9	mv
GN-GSA-MW-3	pH	4/12/2022 15:33	5.45	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:33	20.91	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:33	1.08	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:38	241.1	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:38	1.72	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:38	17.53	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:38	135.13	mv
GN-GSA-MW-3	pH	4/12/2022 15:38	5.49	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:38	20.91	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:38	1.55	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:43	246.25	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:43	1.73	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:43	17.66	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:43	133.68	mv
GN-GSA-MW-3	pH	4/12/2022 15:43	5.53	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:43	20.93	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:43	1.21	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:48	250.86	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:48	1.75	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:48	17.78	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:48	132.02	mv
GN-GSA-MW-3	pH	4/12/2022 15:48	5.57	SU
GN-GSA-MW-3	Sulfide	4/12/2022 15:48	0	mg/L
GN-GSA-MW-3	Temperature	4/12/2022 15:48	20.83	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:48	1.12	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-5	Conductivity	4/12/2022 9:16	607.21	uS/cm
GN-GSA-MW-5	DO	4/12/2022 9:16	0.79	mg/L
GN-GSA-MW-5	Depth to Water Detail	4/12/2022 9:16	27.55	ft
GN-GSA-MW-5	Oxidation Reduction Potention	4/12/2022 9:16	-29.13	mv
GN-GSA-MW-5	pH	4/12/2022 9:16	6.37	SU
GN-GSA-MW-5	Temperature	4/12/2022 9:16	25.29	C
GN-GSA-MW-5	Turbidity	4/12/2022 9:16	2	NTU
GN-GSA-MW-5	Conductivity	4/12/2022 9:21	607.54	uS/cm
GN-GSA-MW-5	DO	4/12/2022 9:21	0.77	mg/L
GN-GSA-MW-5	Depth to Water Detail	4/12/2022 9:21	27.55	ft
GN-GSA-MW-5	Oxidation Reduction Potention	4/12/2022 9:21	-23.07	mv
GN-GSA-MW-5	pH	4/12/2022 9:21	6.36	SU
GN-GSA-MW-5	Temperature	4/12/2022 9:21	25.33	C
GN-GSA-MW-5	Turbidity	4/12/2022 9:21	2.67	NTU
GN-GSA-MW-5	Conductivity	4/12/2022 9:26	607.99	uS/cm
GN-GSA-MW-5	DO	4/12/2022 9:26	0.67	mg/L
GN-GSA-MW-5	Depth to Water Detail	4/12/2022 9:26	27.55	ft
GN-GSA-MW-5	Oxidation Reduction Potention	4/12/2022 9:26	-12.75	mv
GN-GSA-MW-5	pH	4/12/2022 9:26	6.25	SU
GN-GSA-MW-5	Temperature	4/12/2022 9:26	25.39	C
GN-GSA-MW-5	Turbidity	4/12/2022 9:26	1.99	NTU
GN-GSA-MW-5	Conductivity	4/12/2022 9:31	599.71	uS/cm
GN-GSA-MW-5	DO	4/12/2022 9:31	0.66	mg/L
GN-GSA-MW-5	Depth to Water Detail	4/12/2022 9:31	27.55	ft
GN-GSA-MW-5	Oxidation Reduction Potention	4/12/2022 9:31	-13.09	mv
GN-GSA-MW-5	pH	4/12/2022 9:31	6.32	SU
GN-GSA-MW-5	Sulfide	4/12/2022 9:31	0	mg/L
GN-GSA-MW-5	Temperature	4/12/2022 9:31	25.39	C
GN-GSA-MW-5	Turbidity	4/12/2022 9:31	1.24	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-6	Conductivity	4/12/2022 10:07	32.41	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:07	1.41	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:07	27.65	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:07	285.23	mv
GN-GSA-MW-6	pH	4/12/2022 10:07	4.35	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:07	26.82	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:07	2.6	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:12	32.01	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:12	1	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:12	27.73	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:12	305.04	mv
GN-GSA-MW-6	pH	4/12/2022 10:12	4.45	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:12	26.91	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:12	2.6	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:17	31.79	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:17	0.82	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:17	27.74	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:17	320.7	mv
GN-GSA-MW-6	pH	4/12/2022 10:17	4.5	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:17	26.87	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:17	1.45	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:22	31.87	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:22	0.91	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:22	27.76	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:22	347.74	mv
GN-GSA-MW-6	pH	4/12/2022 10:22	4.27	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:22	26.96	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:22	2.18	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:27	31.62	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:27	0.75	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:27	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:27	347.55	mv
GN-GSA-MW-6	pH	4/12/2022 10:27	4.44	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:27	26.89	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:27	2.5	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:30	32.48	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:30	1.14	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:30	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:30	366.58	mv
GN-GSA-MW-6	pH	4/12/2022 10:30	4.44	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:30	26.97	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:30	0.84	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:35	32.5	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:35	0.68	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:35	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:35	358.7	mv
GN-GSA-MW-6	pH	4/12/2022 10:35	4.52	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:35	26.87	C

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-6	Turbidity	4/12/2022 10:35	2.04	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:40	32.44	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:40	0.7	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:40	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:40	374.76	mv
GN-GSA-MW-6	pH	4/12/2022 10:40	4.17	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:40	27	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:40	2.8	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:45	32.6	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:45	0.63	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:45	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:45	372.82	mv
GN-GSA-MW-6	pH	4/12/2022 10:45	4.4	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:45	27.03	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:45	1.59	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:46	32.31	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:46	0.68	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:46	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:46	366.92	mv
GN-GSA-MW-6	pH	4/12/2022 10:46	4.5	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:46	27.07	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:46	1.04	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:51	32.51	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:51	0.71	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:51	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:51	378.8	mv
GN-GSA-MW-6	pH	4/12/2022 10:51	4.35	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:51	27.13	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:51	1.15	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 10:56	29.05	uS/cm
GN-GSA-MW-6	DO	4/12/2022 10:56	0.69	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 10:56	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 10:56	372.46	mv
GN-GSA-MW-6	pH	4/12/2022 10:56	4.49	SU
GN-GSA-MW-6	Temperature	4/12/2022 10:56	27.09	C
GN-GSA-MW-6	Turbidity	4/12/2022 10:56	1.35	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 11:01	32.39	uS/cm
GN-GSA-MW-6	DO	4/12/2022 11:01	0.66	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 11:01	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 11:01	370.05	mv
GN-GSA-MW-6	pH	4/12/2022 11:01	4.55	SU
GN-GSA-MW-6	Temperature	4/12/2022 11:01	27.12	C
GN-GSA-MW-6	Turbidity	4/12/2022 11:01	2.25	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 11:06	32.64	uS/cm
GN-GSA-MW-6	DO	4/12/2022 11:06	0.69	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 11:06	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 11:06	370.34	mv
GN-GSA-MW-6	pH	4/12/2022 11:06	4.57	SU
GN-GSA-MW-6	Temperature	4/12/2022 11:06	27.06	C

**Alabama Power Company  
Plant Gaston Gypsum Pond**

<b>WELL ID</b>	<b>DESCRIPTION</b>	<b>TIME OF READING</b>	<b>VALUE</b>	<b>UNIT</b>
GN-GSA-MW-6	Turbidity	4/12/2022 11:06	2.1	NTU
GN-GSA-MW-6	Conductivity	4/12/2022 11:11	32.7	uS/cm
GN-GSA-MW-6	DO	4/12/2022 11:11	0.7	mg/L
GN-GSA-MW-6	Depth to Water Detail	4/12/2022 11:11	27.78	ft
GN-GSA-MW-6	Oxidation Reduction Potention	4/12/2022 11:11	381.78	mv
GN-GSA-MW-6	pH	4/12/2022 11:11	4.38	SU
GN-GSA-MW-6	Sulfide	4/12/2022 11:11	0	mg/L
GN-GSA-MW-6	Temperature	4/12/2022 11:11	27.16	C
GN-GSA-MW-6	Turbidity	4/12/2022 11:11	1.39	NTU



**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-7	Conductivity	4/12/2022 11:51	401.36	uS/cm
GN-GSA-MW-7	DO	4/12/2022 11:51	2.77	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 11:51	28.06	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 11:51	527.61	mv
GN-GSA-MW-7	pH	4/12/2022 11:51	6.88	SU
GN-GSA-MW-7	Temperature	4/12/2022 11:51	28.82	C
GN-GSA-MW-7	Turbidity	4/12/2022 11:51	1.74	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 11:56	397.79	uS/cm
GN-GSA-MW-7	DO	4/12/2022 11:56	3.07	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 11:56	28.26	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 11:56	531.24	mv
GN-GSA-MW-7	pH	4/12/2022 11:56	6.91	SU
GN-GSA-MW-7	Temperature	4/12/2022 11:56	28.98	C
GN-GSA-MW-7	Turbidity	4/12/2022 11:56	1.56	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:01	396.5	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:01	2.89	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:01	28.53	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:01	533.41	mv
GN-GSA-MW-7	pH	4/12/2022 12:01	6.89	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:01	28.8	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:01	1.11	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:06	393.77	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:06	2.68	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:06	28.76	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:06	532.26	mv
GN-GSA-MW-7	pH	4/12/2022 12:06	6.88	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:06	28.57	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:06	1.12	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:11	392.18	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:11	2.44	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:11	28.81	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:11	526.58	mv
GN-GSA-MW-7	pH	4/12/2022 12:11	6.85	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:11	28.87	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:11	1.3	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:16	392.1	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:16	2.12	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:16	28.88	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:16	524.9	mv
GN-GSA-MW-7	pH	4/12/2022 12:16	6.81	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:16	29.29	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:16	1.19	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:21	389.86	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:21	1.91	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:21	28.97	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:21	511.75	mv
GN-GSA-MW-7	pH	4/12/2022 12:21	6.79	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:21	29.15	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:21	1.03	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:26	385.65	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:26	1.76	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:26	29.04	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:26	494.99	mv

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-7	pH	4/12/2022 12:26	6.79	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:26	29.14	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:26	1.12	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:31	383.76	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:31	1.62	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:31	29.08	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:31	467.07	mv
GN-GSA-MW-7	pH	4/12/2022 12:31	6.77	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:31	29.3	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:31	1	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:36	379.78	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:36	1.49	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:36	29.09	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:36	406.28	mv
GN-GSA-MW-7	pH	4/12/2022 12:36	6.75	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:36	29.28	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:36	0.89	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:43	381.44	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:43	1.52	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:43	29.09	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:43	268.91	mv
GN-GSA-MW-7	pH	4/12/2022 12:43	6.73	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:43	29.88	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:43	1.13	NTU
GN-GSA-MW-7	Conductivity	4/12/2022 12:48	382.74	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:48	1.4	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:48	29.09	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:48	194.39	mv
GN-GSA-MW-7	pH	4/12/2022 12:48	6.73	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:48	30.5	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:48	1.25	NTU
GN-GSA-MW-7	Sulfide	4/12/2022 12:52	0	mg/L
GN-GSA-MW-7	Conductivity	4/12/2022 12:53	379.98	uS/cm
GN-GSA-MW-7	DO	4/12/2022 12:53	1.36	mg/L
GN-GSA-MW-7	Depth to Water Detail	4/12/2022 12:53	29.09	ft
GN-GSA-MW-7	Oxidation Reduction Potention	4/12/2022 12:53	155.76	mv
GN-GSA-MW-7	pH	4/12/2022 12:53	6.73	SU
GN-GSA-MW-7	Temperature	4/12/2022 12:53	30.35	C
GN-GSA-MW-7	Turbidity	4/12/2022 12:53	1.05	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-8	Conductivity	4/12/2022 14:04	299.08	uS/cm
GN-GSA-MW-8	DO	4/12/2022 14:04	1.18	mg/L
GN-GSA-MW-8	Depth to Water Detail	4/12/2022 14:04	21.64	ft
GN-GSA-MW-8	Oxidation Reduction Potention	4/12/2022 14:04	-66.32	mv
GN-GSA-MW-8	pH	4/12/2022 14:04	7.42	SU
GN-GSA-MW-8	Temperature	4/12/2022 14:04	28.34	C
GN-GSA-MW-8	Turbidity	4/12/2022 14:04	14.1	NTU
GN-GSA-MW-8	Conductivity	4/12/2022 14:09	298.17	uS/cm
GN-GSA-MW-8	DO	4/12/2022 14:09	1.12	mg/L
GN-GSA-MW-8	Depth to Water Detail	4/12/2022 14:09	21.81	ft
GN-GSA-MW-8	Oxidation Reduction Potention	4/12/2022 14:09	-82.07	mv
GN-GSA-MW-8	pH	4/12/2022 14:09	7.41	SU
GN-GSA-MW-8	Temperature	4/12/2022 14:09	28.3	C
GN-GSA-MW-8	Turbidity	4/12/2022 14:09	10.86	NTU
GN-GSA-MW-8	Conductivity	4/12/2022 14:14	297.28	uS/cm
GN-GSA-MW-8	DO	4/12/2022 14:14	1.09	mg/L
GN-GSA-MW-8	Depth to Water Detail	4/12/2022 14:14	22.09	ft
GN-GSA-MW-8	Oxidation Reduction Potention	4/12/2022 14:14	-87.2	mv
GN-GSA-MW-8	pH	4/12/2022 14:14	7.35	SU
GN-GSA-MW-8	Temperature	4/12/2022 14:14	28.28	C
GN-GSA-MW-8	Turbidity	4/12/2022 14:14	5.96	NTU
GN-GSA-MW-8	Conductivity	4/12/2022 14:19	295.25	uS/cm
GN-GSA-MW-8	DO	4/12/2022 14:19	1.11	mg/L
GN-GSA-MW-8	Depth to Water Detail	4/12/2022 14:19	22.18	ft
GN-GSA-MW-8	Oxidation Reduction Potention	4/12/2022 14:19	-85.31	mv
GN-GSA-MW-8	pH	4/12/2022 14:19	7.29	SU
GN-GSA-MW-8	Temperature	4/12/2022 14:19	28.17	C
GN-GSA-MW-8	Turbidity	4/12/2022 14:19	4.38	NTU
GN-GSA-MW-8	Conductivity	4/12/2022 14:24	294.59	uS/cm
GN-GSA-MW-8	DO	4/12/2022 14:24	1.13	mg/L
GN-GSA-MW-8	Depth to Water Detail	4/12/2022 14:24	22.29	ft
GN-GSA-MW-8	Oxidation Reduction Potention	4/12/2022 14:24	-83.82	mv
GN-GSA-MW-8	pH	4/12/2022 14:24	7.22	SU
GN-GSA-MW-8	Sulfide	4/12/2022 14:24	0	mg/L
GN-GSA-MW-8	Temperature	4/12/2022 14:24	28.08	C
GN-GSA-MW-8	Turbidity	4/12/2022 14:24	2.91	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-9	Conductivity	4/12/2022 15:12	145.35	uS/cm
GN-GSA-MW-9	DO	4/12/2022 15:12	0.72	mg/L
GN-GSA-MW-9	Depth to Water Detail	4/12/2022 15:12	22.84	ft
GN-GSA-MW-9	Oxidation Reduction Potention	4/12/2022 15:12	144.75	mv
GN-GSA-MW-9	pH	4/12/2022 15:12	6.07	SU
GN-GSA-MW-9	Temperature	4/12/2022 15:12	28.18	C
GN-GSA-MW-9	Turbidity	4/12/2022 15:12	2.84	NTU
GN-GSA-MW-9	Conductivity	4/12/2022 15:17	170.45	uS/cm
GN-GSA-MW-9	DO	4/12/2022 15:17	0.81	mg/L
GN-GSA-MW-9	Depth to Water Detail	4/12/2022 15:17	23.61	ft
GN-GSA-MW-9	Oxidation Reduction Potention	4/12/2022 15:17	157.46	mv
GN-GSA-MW-9	pH	4/12/2022 15:17	6.1	SU
GN-GSA-MW-9	Temperature	4/12/2022 15:17	28.41	C
GN-GSA-MW-9	Turbidity	4/12/2022 15:17	3.3	NTU
GN-GSA-MW-9	Conductivity	4/12/2022 15:22	201.21	uS/cm
GN-GSA-MW-9	DO	4/12/2022 15:22	0.9	mg/L
GN-GSA-MW-9	Depth to Water Detail	4/12/2022 15:22	24.11	ft
GN-GSA-MW-9	Oxidation Reduction Potention	4/12/2022 15:22	154.8	mv
GN-GSA-MW-9	pH	4/12/2022 15:22	6.3	SU
GN-GSA-MW-9	Temperature	4/12/2022 15:22	27.97	C
GN-GSA-MW-9	Turbidity	4/12/2022 15:22	4.78	NTU
GN-GSA-MW-9	Conductivity	4/12/2022 15:27	219.85	uS/cm
GN-GSA-MW-9	DO	4/12/2022 15:27	0.89	mg/L
GN-GSA-MW-9	Depth to Water Detail	4/12/2022 15:27	24.39	ft
GN-GSA-MW-9	Oxidation Reduction Potention	4/12/2022 15:27	154.81	mv
GN-GSA-MW-9	pH	4/12/2022 15:27	6.33	SU
GN-GSA-MW-9	Temperature	4/12/2022 15:27	27.99	C
GN-GSA-MW-9	Turbidity	4/12/2022 15:27	3.03	NTU
GN-GSA-MW-9	Conductivity	4/12/2022 15:32	231.64	uS/cm
GN-GSA-MW-9	DO	4/12/2022 15:32	0.88	mg/L
GN-GSA-MW-9	Depth to Water Detail	4/12/2022 15:32	24.54	ft
GN-GSA-MW-9	Oxidation Reduction Potention	4/12/2022 15:32	157.93	mv
GN-GSA-MW-9	pH	4/12/2022 15:32	6.29	SU
GN-GSA-MW-9	Temperature	4/12/2022 15:32	28.07	C
GN-GSA-MW-9	Turbidity	4/12/2022 15:32	3.2	NTU
GN-GSA-MW-9	Conductivity	4/12/2022 15:37	238.59	uS/cm
GN-GSA-MW-9	DO	4/12/2022 15:37	0.86	mg/L
GN-GSA-MW-9	Depth to Water Detail	4/12/2022 15:37	24.66	ft
GN-GSA-MW-9	Oxidation Reduction Potention	4/12/2022 15:37	160.43	mv
GN-GSA-MW-9	pH	4/12/2022 15:37	6.26	SU
GN-GSA-MW-9	Temperature	4/12/2022 15:37	28.15	C
GN-GSA-MW-9	Turbidity	4/12/2022 15:37	2.71	NTU
GN-GSA-MW-9	Conductivity	4/12/2022 15:42	240.7	uS/cm
GN-GSA-MW-9	DO	4/12/2022 15:42	0.82	mg/L
GN-GSA-MW-9	Depth to Water Detail	4/12/2022 15:42	24.77	ft
GN-GSA-MW-9	Oxidation Reduction Potention	4/12/2022 15:42	162.55	mv
GN-GSA-MW-9	pH	4/12/2022 15:42	6.22	SU
GN-GSA-MW-9	Sulfide	4/12/2022 15:42	0	mg/L
GN-GSA-MW-9	Temperature	4/12/2022 15:42	28.12	C
GN-GSA-MW-9	Turbidity	4/12/2022 15:42	4.95	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-10	Conductivity	4/13/2022 9:46	454.81	uS/cm
GN-GSA-MW-10	DO	4/13/2022 9:46	0.29	mg/L
GN-GSA-MW-10	Depth to Water Detail	4/13/2022 9:46	21.98	ft
GN-GSA-MW-10	Oxidation Reduction Potention	4/13/2022 9:46	189.11	mv
GN-GSA-MW-10	pH	4/13/2022 9:46	6.86	SU
GN-GSA-MW-10	Temperature	4/13/2022 9:46	30.21	C
GN-GSA-MW-10	Turbidity	4/13/2022 9:46	0.83	NTU
GN-GSA-MW-10	Conductivity	4/13/2022 9:51	453.91	uS/cm
GN-GSA-MW-10	DO	4/13/2022 9:51	0.23	mg/L
GN-GSA-MW-10	Depth to Water Detail	4/13/2022 9:51	21.98	ft
GN-GSA-MW-10	Oxidation Reduction Potention	4/13/2022 9:51	185.39	mv
GN-GSA-MW-10	pH	4/13/2022 9:51	6.86	SU
GN-GSA-MW-10	Temperature	4/13/2022 9:51	30.24	C
GN-GSA-MW-10	Turbidity	4/13/2022 9:51	0.73	NTU
GN-GSA-MW-10	Conductivity	4/13/2022 9:56	452.3	uS/cm
GN-GSA-MW-10	DO	4/13/2022 9:56	0.21	mg/L
GN-GSA-MW-10	Depth to Water Detail	4/13/2022 9:56	21.98	ft
GN-GSA-MW-10	Oxidation Reduction Potention	4/13/2022 9:56	187.4	mv
GN-GSA-MW-10	pH	4/13/2022 9:56	6.77	SU
GN-GSA-MW-10	Temperature	4/13/2022 9:56	30.29	C
GN-GSA-MW-10	Turbidity	4/13/2022 9:56	0.87	NTU
GN-GSA-MW-10	Conductivity	4/13/2022 10:01	449.82	uS/cm
GN-GSA-MW-10	DO	4/13/2022 10:01	0.2	mg/L
GN-GSA-MW-10	Depth to Water Detail	4/13/2022 10:01	21.98	ft
GN-GSA-MW-10	Oxidation Reduction Potention	4/13/2022 10:01	179.51	mv
GN-GSA-MW-10	pH	4/13/2022 10:01	6.85	SU
GN-GSA-MW-10	Sulfide	4/13/2022 10:01	0	mg/L
GN-GSA-MW-10	Temperature	4/13/2022 10:01	30.23	C
GN-GSA-MW-10	Turbidity	4/13/2022 10:01	0.72	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-11	Conductivity	4/13/2022 11:04	163.17	uS/cm
GN-GSA-MW-11	DO	4/13/2022 11:04	1.17	mg/L
GN-GSA-MW-11	Depth to Water Detail	4/13/2022 11:04	21.36	ft
GN-GSA-MW-11	Oxidation Reduction Potention	4/13/2022 11:04	260.58	mv
GN-GSA-MW-11	pH	4/13/2022 11:04	5.57	SU
GN-GSA-MW-11	Temperature	4/13/2022 11:04	29.23	C
GN-GSA-MW-11	Turbidity	4/13/2022 11:04	0.86	NTU
GN-GSA-MW-11	Conductivity	4/13/2022 11:09	156.79	uS/cm
GN-GSA-MW-11	DO	4/13/2022 11:09	0.93	mg/L
GN-GSA-MW-11	Depth to Water Detail	4/13/2022 11:09	21.36	ft
GN-GSA-MW-11	Oxidation Reduction Potention	4/13/2022 11:09	260.14	mv
GN-GSA-MW-11	pH	4/13/2022 11:09	5.39	SU
GN-GSA-MW-11	Temperature	4/13/2022 11:09	29.11	C
GN-GSA-MW-11	Turbidity	4/13/2022 11:09	1.04	NTU
GN-GSA-MW-11	Conductivity	4/13/2022 11:14	146.4	uS/cm
GN-GSA-MW-11	DO	4/13/2022 11:14	0.69	mg/L
GN-GSA-MW-11	Depth to Water Detail	4/13/2022 11:14	21.36	ft
GN-GSA-MW-11	Oxidation Reduction Potention	4/13/2022 11:14	257.05	mv
GN-GSA-MW-11	pH	4/13/2022 11:14	5.39	SU
GN-GSA-MW-11	Temperature	4/13/2022 11:14	29.03	C
GN-GSA-MW-11	Turbidity	4/13/2022 11:14	0.83	NTU
GN-GSA-MW-11	Conductivity	4/13/2022 11:19	145.69	uS/cm
GN-GSA-MW-11	DO	4/13/2022 11:19	0.61	mg/L
GN-GSA-MW-11	Depth to Water Detail	4/13/2022 11:19	21.36	ft
GN-GSA-MW-11	Oxidation Reduction Potention	4/13/2022 11:19	262.37	mv
GN-GSA-MW-11	pH	4/13/2022 11:19	5.41	SU
GN-GSA-MW-11	Temperature	4/13/2022 11:19	29.02	C
GN-GSA-MW-11	Turbidity	4/13/2022 11:19	0.9	NTU
GN-GSA-MW-11	Conductivity	4/13/2022 11:24	143.07	uS/cm
GN-GSA-MW-11	DO	4/13/2022 11:24	0.53	mg/L
GN-GSA-MW-11	Depth to Water Detail	4/13/2022 11:24	21.36	ft
GN-GSA-MW-11	Oxidation Reduction Potention	4/13/2022 11:24	271.46	mv
GN-GSA-MW-11	pH	4/13/2022 11:24	5.41	SU
GN-GSA-MW-11	Temperature	4/13/2022 11:24	28.97	C
GN-GSA-MW-11	Turbidity	4/13/2022 11:24	0.61	NTU
GN-GSA-MW-11	Conductivity	4/13/2022 11:29	140.99	uS/cm
GN-GSA-MW-11	DO	4/13/2022 11:29	0.46	mg/L
GN-GSA-MW-11	Depth to Water Detail	4/13/2022 11:29	21.36	ft
GN-GSA-MW-11	Oxidation Reduction Potention	4/13/2022 11:29	285.42	mv
GN-GSA-MW-11	pH	4/13/2022 11:29	5.29	SU
GN-GSA-MW-11	Sulfide	4/13/2022 11:29	0	mg/L
GN-GSA-MW-11	Temperature	4/13/2022 11:29	29	C
GN-GSA-MW-11	Turbidity	4/13/2022 11:29	0.57	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-12	Conductivity	4/13/2022 12:05	426.06	uS/cm
GN-GSA-MW-12	DO	4/13/2022 12:05	1.39	mg/L
GN-GSA-MW-12	Depth to Water Detail	4/13/2022 12:05	18.94	ft
GN-GSA-MW-12	Oxidation Reduction Potention	4/13/2022 12:05	192.76	mv
GN-GSA-MW-12	pH	4/13/2022 12:05	6.78	SU
GN-GSA-MW-12	Temperature	4/13/2022 12:05	28.16	C
GN-GSA-MW-12	Turbidity	4/13/2022 12:05	1.58	NTU
GN-GSA-MW-12	Conductivity	4/13/2022 12:10	421.8	uS/cm
GN-GSA-MW-12	DO	4/13/2022 12:10	0.88	mg/L
GN-GSA-MW-12	Depth to Water Detail	4/13/2022 12:10	18.96	ft
GN-GSA-MW-12	Oxidation Reduction Potention	4/13/2022 12:10	184.63	mv
GN-GSA-MW-12	pH	4/13/2022 12:10	6.76	SU
GN-GSA-MW-12	Temperature	4/13/2022 12:10	28.1	C
GN-GSA-MW-12	Turbidity	4/13/2022 12:10	1.29	NTU
GN-GSA-MW-12	Conductivity	4/13/2022 12:15	418.29	uS/cm
GN-GSA-MW-12	DO	4/13/2022 12:15	0.62	mg/L
GN-GSA-MW-12	Depth to Water Detail	4/13/2022 12:15	18.96	ft
GN-GSA-MW-12	Oxidation Reduction Potention	4/13/2022 12:15	162.97	mv
GN-GSA-MW-12	pH	4/13/2022 12:15	6.75	SU
GN-GSA-MW-12	Temperature	4/13/2022 12:15	28.09	C
GN-GSA-MW-12	Turbidity	4/13/2022 12:15	0.85	NTU
GN-GSA-MW-12	Conductivity	4/13/2022 12:20	415.59	uS/cm
GN-GSA-MW-12	DO	4/13/2022 12:20	0.45	mg/L
GN-GSA-MW-12	Depth to Water Detail	4/13/2022 12:20	18.96	ft
GN-GSA-MW-12	Oxidation Reduction Potention	4/13/2022 12:20	148.05	mv
GN-GSA-MW-12	pH	4/13/2022 12:20	6.74	SU
GN-GSA-MW-12	Sulfide	4/13/2022 12:20	0	mg/L
GN-GSA-MW-12	Temperature	4/13/2022 12:20	28.15	C
GN-GSA-MW-12	Turbidity	4/13/2022 12:20	0.71	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-13	Conductivity	4/13/2022 10:41	465.24	uS/cm
GN-GSA-MW-13	DO	4/13/2022 10:41	1.85	mg/L
GN-GSA-MW-13	Depth to Water Detail	4/13/2022 10:41	22.52	ft
GN-GSA-MW-13	Oxidation Reduction Potention	4/13/2022 10:41	18.43	mv
GN-GSA-MW-13	pH	4/13/2022 10:41	6.75	SU
GN-GSA-MW-13	Temperature	4/13/2022 10:41	19.95	C
GN-GSA-MW-13	Turbidity	4/13/2022 10:41	0.69	NTU
GN-GSA-MW-13	Conductivity	4/13/2022 10:46	463.02	uS/cm
GN-GSA-MW-13	DO	4/13/2022 10:46	1.7	mg/L
GN-GSA-MW-13	Depth to Water Detail	4/13/2022 10:46	22.52	ft
GN-GSA-MW-13	Oxidation Reduction Potention	4/13/2022 10:46	18.2	mv
GN-GSA-MW-13	pH	4/13/2022 10:46	6.78	SU
GN-GSA-MW-13	Temperature	4/13/2022 10:46	19.9	C
GN-GSA-MW-13	Turbidity	4/13/2022 10:46	0.63	NTU
GN-GSA-MW-13	Conductivity	4/13/2022 10:51	460.39	uS/cm
GN-GSA-MW-13	DO	4/13/2022 10:51	1.68	mg/L
GN-GSA-MW-13	Depth to Water Detail	4/13/2022 10:51	22.52	ft
GN-GSA-MW-13	Oxidation Reduction Potention	4/13/2022 10:51	18.83	mv
GN-GSA-MW-13	pH	4/13/2022 10:51	6.81	SU
GN-GSA-MW-13	Temperature	4/13/2022 10:51	19.82	C
GN-GSA-MW-13	Turbidity	4/13/2022 10:51	0.65	NTU
GN-GSA-MW-13	Conductivity	4/13/2022 10:56	459.11	uS/cm
GN-GSA-MW-13	DO	4/13/2022 10:56	1.61	mg/L
GN-GSA-MW-13	Depth to Water Detail	4/13/2022 10:56	22.52	ft
GN-GSA-MW-13	Oxidation Reduction Potention	4/13/2022 10:56	18.85	mv
GN-GSA-MW-13	pH	4/13/2022 10:56	6.84	SU
GN-GSA-MW-13	Sulfide	4/13/2022 10:56	0	mg/L
GN-GSA-MW-13	Temperature	4/13/2022 10:56	19.83	C
GN-GSA-MW-13	Turbidity	4/13/2022 10:56	0.85	NTU



**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-14S	Conductivity	4/13/2022 8:25	322.93	uS/cm
GN-GSA-MW-14S	DO	4/13/2022 8:25	3.21	mg/L
GN-GSA-MW-14S	Depth to Water Detail	4/13/2022 8:25	14.43	ft
GN-GSA-MW-14S	Oxidation Reduction Potention	4/13/2022 8:25	3.55	mv
GN-GSA-MW-14S	pH	4/13/2022 8:25	7.43	SU
GN-GSA-MW-14S	Temperature	4/13/2022 8:25	19.27	C
GN-GSA-MW-14S	Turbidity	4/13/2022 8:25	3.87	NTU
GN-GSA-MW-14S	Conductivity	4/13/2022 8:30	315.3	uS/cm
GN-GSA-MW-14S	DO	4/13/2022 8:30	3.37	mg/L
GN-GSA-MW-14S	Depth to Water Detail	4/13/2022 8:30	14.46	ft
GN-GSA-MW-14S	Oxidation Reduction Potention	4/13/2022 8:30	9.98	mv
GN-GSA-MW-14S	pH	4/13/2022 8:30	7.4	SU
GN-GSA-MW-14S	Temperature	4/13/2022 8:30	19.28	C
GN-GSA-MW-14S	Turbidity	4/13/2022 8:30	3.97	NTU
GN-GSA-MW-14S	Conductivity	4/13/2022 8:35	321.29	uS/cm
GN-GSA-MW-14S	DO	4/13/2022 8:35	3.35	mg/L
GN-GSA-MW-14S	Depth to Water Detail	4/13/2022 8:35	14.47	ft
GN-GSA-MW-14S	Oxidation Reduction Potention	4/13/2022 8:35	14.37	mv
GN-GSA-MW-14S	pH	4/13/2022 8:35	7.4	SU
GN-GSA-MW-14S	Temperature	4/13/2022 8:35	19.3	C
GN-GSA-MW-14S	Turbidity	4/13/2022 8:35	3.7	NTU
GN-GSA-MW-14S	Conductivity	4/13/2022 8:40	320.94	uS/cm
GN-GSA-MW-14S	DO	4/13/2022 8:40	3.36	mg/L
GN-GSA-MW-14S	Depth to Water Detail	4/13/2022 8:40	14.49	ft
GN-GSA-MW-14S	Oxidation Reduction Potention	4/13/2022 8:40	16.42	mv
GN-GSA-MW-14S	pH	4/13/2022 8:40	7.4	SU
GN-GSA-MW-14S	Sulfide	4/13/2022 8:40	0	mg/L
GN-GSA-MW-14S	Temperature	4/13/2022 8:40	19.31	C
GN-GSA-MW-14S	Turbidity	4/13/2022 8:40	3.8	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-15	Conductivity	4/12/2022 11:58	42.99	uS/cm
GN-GSA-MW-15	DO	4/12/2022 11:58	0.88	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 11:58	10.41	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 11:58	109.56	mv
GN-GSA-MW-15	pH	4/12/2022 11:58	4.89	SU
GN-GSA-MW-15	Temperature	4/12/2022 11:58	19.94	C
GN-GSA-MW-15	Turbidity	4/12/2022 11:58	6.42	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:03	39.08	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:03	1.73	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:03	10.84	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:03	116.06	mv
GN-GSA-MW-15	pH	4/12/2022 12:03	4.84	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:03	19.78	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:03	5.71	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:08	33.92	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:08	3.75	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:08	11.2	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:08	120.6	mv
GN-GSA-MW-15	pH	4/12/2022 12:08	4.85	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:08	19.46	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:08	8.36	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:13	32.37	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:13	4.3	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:13	11.43	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:13	119.65	mv
GN-GSA-MW-15	pH	4/12/2022 12:13	4.94	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:13	19.88	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:13	12.69	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:18	31.56	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:18	4.35	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:18	11.6	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:18	115.39	mv
GN-GSA-MW-15	pH	4/12/2022 12:18	5.06	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:18	20.1	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:18	14.3	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:23	30.77	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:23	4.25	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:23	11.72	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:23	113.24	mv
GN-GSA-MW-15	pH	4/12/2022 12:23	5.17	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:23	20.08	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:23	14.6	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:28	30.14	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:28	4.12	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:28	11.8	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:28	121.47	mv
GN-GSA-MW-15	pH	4/12/2022 12:28	5.12	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:28	19.77	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:28	16.4	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:33	29.98	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:33	3.95	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:33	11.86	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:33	114.55	mv

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-15	pH	4/12/2022 12:33	5.22	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:33	19.91	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:33	16	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:38	29.52	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:38	3.85	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:38	11.89	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:38	114.25	mv
GN-GSA-MW-15	pH	4/12/2022 12:38	5.23	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:38	20	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:38	15.2	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:43	29.31	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:43	3.81	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:43	11.92	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:43	111.2	mv
GN-GSA-MW-15	pH	4/12/2022 12:43	5.29	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:43	20	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:43	14.4	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:48	29.03	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:48	3.74	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:48	11.95	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:48	112.34	mv
GN-GSA-MW-15	pH	4/12/2022 12:48	5.31	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:48	20.27	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:48	13	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:53	28.65	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:53	3.69	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:53	11.97	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:53	110.49	mv
GN-GSA-MW-15	pH	4/12/2022 12:53	5.32	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:53	20.35	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:53	11.8	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 12:58	28.51	uS/cm
GN-GSA-MW-15	DO	4/12/2022 12:58	3.66	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 12:58	11.98	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 12:58	111.83	mv
GN-GSA-MW-15	pH	4/12/2022 12:58	5.31	SU
GN-GSA-MW-15	Temperature	4/12/2022 12:58	20.17	C
GN-GSA-MW-15	Turbidity	4/12/2022 12:58	11	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:03	28.39	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:03	3.65	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:03	12.01	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:03	113.22	mv
GN-GSA-MW-15	pH	4/12/2022 13:03	5.29	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:03	20.25	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:03	13.43	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:08	28.41	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:08	3.64	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:08	12.03	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:08	114.11	mv
GN-GSA-MW-15	pH	4/12/2022 13:08	5.28	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:08	20.34	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:08	12.76	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:13	28.51	uS/cm

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-15	DO	4/12/2022 13:13	3.62	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:13	12.03	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:13	116.24	mv
GN-GSA-MW-15	pH	4/12/2022 13:13	5.27	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:13	20.15	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:13	12.84	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:18	28.53	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:18	3.62	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:18	12.05	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:18	117.32	mv
GN-GSA-MW-15	pH	4/12/2022 13:18	5.24	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:18	20.26	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:18	12.83	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:23	28.68	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:23	3.61	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:23	12.06	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:23	113.7	mv
GN-GSA-MW-15	pH	4/12/2022 13:23	5.3	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:23	20.28	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:23	13.17	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:28	28.97	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:28	3.6	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:28	12.06	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:28	112.67	mv
GN-GSA-MW-15	pH	4/12/2022 13:28	5.33	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:28	20.3	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:28	12.4	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:33	29.09	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:33	3.62	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:33	12.07	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:33	111.72	mv
GN-GSA-MW-15	pH	4/12/2022 13:33	5.34	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:33	20.33	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:33	12.32	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:38	29.06	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:38	3.63	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:38	12.07	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:38	106.51	mv
GN-GSA-MW-15	pH	4/12/2022 13:38	5.39	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:38	20.48	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:38	11.1	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:43	28.98	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:43	3.65	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:43	12.09	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:43	110.3	mv
GN-GSA-MW-15	pH	4/12/2022 13:43	5.33	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:43	20.15	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:43	11	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:48	29.04	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:48	3.67	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:48	12.09	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:48	109.35	mv
GN-GSA-MW-15	pH	4/12/2022 13:48	5.35	SU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-15	Temperature	4/12/2022 13:48	20.45	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:48	13.7	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:53	28.85	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:53	3.66	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:53	12.09	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:53	108.56	mv
GN-GSA-MW-15	pH	4/12/2022 13:53	5.35	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:53	20.37	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:53	11.1	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 13:58	28.49	uS/cm
GN-GSA-MW-15	DO	4/12/2022 13:58	3.7	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 13:58	12.09	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 13:58	109.23	mv
GN-GSA-MW-15	pH	4/12/2022 13:58	5.33	SU
GN-GSA-MW-15	Temperature	4/12/2022 13:58	20.45	C
GN-GSA-MW-15	Turbidity	4/12/2022 13:58	12.17	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 14:03	28.08	uS/cm
GN-GSA-MW-15	DO	4/12/2022 14:03	3.74	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 14:03	12.09	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 14:03	112.74	mv
GN-GSA-MW-15	pH	4/12/2022 14:03	5.27	SU
GN-GSA-MW-15	Temperature	4/12/2022 14:03	20.3	C
GN-GSA-MW-15	Turbidity	4/12/2022 14:03	9.72	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 14:08	27.73	uS/cm
GN-GSA-MW-15	DO	4/12/2022 14:08	3.74	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 14:08	12.09	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 14:08	115.22	mv
GN-GSA-MW-15	pH	4/12/2022 14:08	5.25	SU
GN-GSA-MW-15	Temperature	4/12/2022 14:08	20.52	C
GN-GSA-MW-15	Turbidity	4/12/2022 14:08	9.79	NTU
GN-GSA-MW-15	Conductivity	4/12/2022 14:13	27.47	uS/cm
GN-GSA-MW-15	DO	4/12/2022 14:13	3.77	mg/L
GN-GSA-MW-15	Depth to Water Detail	4/12/2022 14:13	12.09	ft
GN-GSA-MW-15	Oxidation Reduction Potention	4/12/2022 14:13	115.18	mv
GN-GSA-MW-15	pH	4/12/2022 14:13	5.25	SU
GN-GSA-MW-15	Sulfide	4/12/2022 14:13	0	mg/L
GN-GSA-MW-15	Temperature	4/12/2022 14:13	20.47	C
GN-GSA-MW-15	Turbidity	4/12/2022 14:13	9.73	NTU

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

# *Analytical Report*



**Sample Group :** WMWGASG\_1359

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

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

**Attention :** Dustin Brooks & Greg Dyer

**Released By :** Brooke Caton  
(205) 664-6101  
tbwill@southernco.com

May 06, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on April 14, 2022. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114  
Issued By: State of Florida, Department of Health  
Expiration: June 30, 2022

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

Sincerely,

Quality Control: **Brooke  
Caton**

Digitally signed by Brooke  
Caton  
Date: 2022.05.06  
13:11:51 -05'00'

Supervision: **T Durant  
Maske**

Digitally signed by T Durant Maske  
DN: cn=T Durant Maske, o=T Durant Maske c=US  
United States, +US United States  
e=tdmaske@southernco.com  
Reason: I am approving this document  
Location:  
Date: 2022-05-09 10:41:05.00



### REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted.  
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Alabama Power's General Test Laboratory.



Total Metals ICP

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	724286	WMWGASG_1359
BC07344	724286	WMWGASG_1359
BC07345	724286	WMWGASG_1359
BC07346	724286	WMWGASG_1359
BC07347	724286	WMWGASG_1359
BC07348	724286	WMWGASG_1359
BC07349	724286	WMWGASG_1359
BC07350	724286	WMWGASG_1359
BC07351	724286	WMWGASG_1359
BC07352	724286	WMWGASG_1359
BC07353	724287	WMWGASG_1359
BC07354	724287	WMWGASG_1359
BC07355	724287	WMWGASG_1359
BC07356	724287	WMWGASG_1359
BC07357	724287	WMWGASG_1359
BC07358	724287	WMWGASG_1359
BC07359	724287	WMWGASG_1359
BC07360	724287	WMWGASG_1359
BC07361	724287	WMWGASG_1359

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 all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.



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

#### Matrix Specific Quality Control Procedures:

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

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

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC07343	Calcium	10.15
BC07345	Calcium	10.15
BC07346	Calcium	10.15
BC07347	Calcium	10.15
BC07348	Calcium	10.15
BC07350	Calcium	10.15
BC07352	Calcium	10.15
BC07353	Calcium	10.15
BC07354	Calcium	10.15
BC07355	Calcium	10.15
BC07356	Calcium	10.15
BC07357	Calcium	10.15
BC07360	Calcium	10.15

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

Dissolved Metals ICP

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	724436	WMWGASG_1359
BC07344	724436	WMWGASG_1359
BC07345	724436	WMWGASG_1359
BC07346	724436	WMWGASG_1359
BC07347	724436	WMWGASG_1359
BC07348	724436	WMWGASG_1359
BC07350	724436	WMWGASG_1359
BC07351	724436	WMWGASG_1359
BC07352	724436	WMWGASG_1359
BC07353	724436	WMWGASG_1359
BC07354	724437	WMWGASG_1359
BC07355	724437	WMWGASG_1359
BC07356	724437	WMWGASG_1359
BC07357	724437	WMWGASG_1359
BC07359	724437	WMWGASG_1359
BC07360	724437	WMWGASG_1359

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

#### General Quality Control Procedures:

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

- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

#### Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC07360 Calcium MS/MSD spike levels were <30% of the sample concentrations.
  - A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.
7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC07343	Calcium	10.15
BC07345	Calcium	10.15
BC07346	Calcium	10.15
BC07347	Calcium	10.15
BC07348	Calcium	10.15
BC07350	Calcium	10.15
BC07352	Calcium	10.15
BC07353	Calcium	10.15
BC07354	Calcium	10.15
BC07355	Calcium	10.15
BC07356	Calcium	10.15
BC07357	Calcium	10.15
BC07360	Calcium	10.15

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

Total Metals ICPMS

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	724101	WMWGASG_1359
BC07344	724101	WMWGASG_1359
BC07345	724101	WMWGASG_1359
BC07346	724101	WMWGASG_1359
BC07347	724101	WMWGASG_1359
BC07348	724101	WMWGASG_1359
BC07349	724101	WMWGASG_1359
BC07350	724101	WMWGASG_1359
BC07351	724101	WMWGASG_1359
BC07352	724101	WMWGASG_1359
BC07353	724102	WMWGASG_1359
BC07354	724102	WMWGASG_1359
BC07355	724102	WMWGASG_1359
BC07356	724102	WMWGASG_1359
BC07357	724102	WMWGASG_1359
BC07358	724102	WMWGASG_1359
BC07359	724102	WMWGASG_1359
BC07360	724102	WMWGASG_1359
BC07361	724102	WMWGASG_1359

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.

Revision 5

- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

#### Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.
7. 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>
BC07347	Barium	5.075

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

## Dissolved Metals ICPMS

Gaston Gypsum

WMWVGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	724142	WMWVGASG_1359
BC07344	724142	WMWVGASG_1359
BC07345	724142	WMWVGASG_1359
BC07346	724142	WMWVGASG_1359
BC07347	724142	WMWVGASG_1359
BC07348	724142	WMWVGASG_1359
BC07350	724142	WMWVGASG_1359
BC07351	724142	WMWVGASG_1359
BC07352	724142	WMWVGASG_1359
BC07353	724142	WMWVGASG_1359
BC07354	724143	WMWVGASG_1359
BC07355	724143	WMWVGASG_1359
BC07356	724143	WMWVGASG_1359
BC07357	724143	WMWVGASG_1359
BC07359	724143	WMWVGASG_1359
BC07360	724143	WMWVGASG_1359

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

### General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.

- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

#### Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.
7. 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>
BC07347	Barium	5.075

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



Mercury

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	724731	WMWGASG_1359
BC07344	724731	WMWGASG_1359
BC07345	724731	WMWGASG_1359
BC07346	724731	WMWGASG_1359
BC07347	724731	WMWGASG_1359
BC07348	724731	WMWGASG_1359
BC07349	724731	WMWGASG_1359
BC07350	724731	WMWGASG_1359
BC07351	724731	WMWGASG_1359
BC07352	724731	WMWGASG_1359
BC07353	724732	WMWGASG_1359
BC07354	724732	WMWGASG_1359
BC07355	724732	WMWGASG_1359
BC07356	724732	WMWGASG_1359
BC07357	724732	WMWGASG_1359
BC07358	724732	WMWGASG_1359
BC07359	724732	WMWGASG_1359
BC07360	724732	WMWGASG_1359
BC07361	724732	WMWGASG_1359

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.

Revision 5

- 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 analytical batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.
7. All samples were analyzed without a dilution.

Nitrate-Nitrite

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	723877	WMWGASG_1359
BC07344	723877	WMWGASG_1359
BC07345	723877	WMWGASG_1359
BC07346	723877	WMWGASG_1359
BC07347	723877	WMWGASG_1359
BC07348	723877	WMWGASG_1359
BC07349	723877	WMWGASG_1359
BC07350	723877	WMWGASG_1359
BC07351	723877	WMWGASG_1359
BC07352	723877	WMWGASG_1359
BC07353	723878	WMWGASG_1359
BC07354	723878	WMWGASG_1359
BC07355	723878	WMWGASG_1359
BC07356	723878	WMWGASG_1359
BC07357	723878	WMWGASG_1359
BC07358	723878	WMWGASG_1359
BC07359	723878	WMWGASG_1359
BC07360	723878	WMWGASG_1359
BC07361	723878	WMWGASG_1359

4. All of the above samples were prepared and analyzed for NO<sub>x</sub> by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.

Revision 5

- All continued calibration blanks (CCB) were below the limit of detection.

### EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
  - Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.
7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Total Organic Carbon

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	724406	WMWGASG_1359
BC07344	724406	WMWGASG_1359
BC07345	724406	WMWGASG_1359
BC07346	724406	WMWGASG_1359
BC07347	724406	WMWGASG_1359
BC07348	724406	WMWGASG_1359
BC07349	724406	WMWGASG_1359
BC07350	724406	WMWGASG_1359
BC07351	724406	WMWGASG_1359
BC07352	724406	WMWGASG_1359
BC07353	724407	WMWGASG_1359
BC07354	724407	WMWGASG_1359
BC07355	724407	WMWGASG_1359
BC07356	724407	WMWGASG_1359
BC07357	724407	WMWGASG_1359
BC07358	724407	WMWGASG_1359
BC07359	724407	WMWGASG_1359
BC07360	724407	WMWGASG_1359
BC07361	724407	WMWGASG_1359

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
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 criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Revision 5

### Matrix Specific Quality Control Procedures:

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

Total Dissolved Solids

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	723695	WMWGASG_1359
BC07344	723695	WMWGASG_1359
BC07345	723695	WMWGASG_1359
BC07346	723695	WMWGASG_1359
BC07347	723695	WMWGASG_1359
BC07348	723695	WMWGASG_1359
BC07349	723696	WMWGASG_1359
BC07350	723696	WMWGASG_1359
BC07351	723696	WMWGASG_1359
BC07352	723696	WMWGASG_1359
BC07353	723696	WMWGASG_1359
BC07354	723696	WMWGASG_1359
BC07355	723696	WMWGASG_1359
BC07356	723696	WMWGASG_1359
BC07357	723696	WMWGASG_1359
BC07358	723696	WMWGASG_1359
BC07359	723772	WMWGASG_1359
BC07360	723772	WMWGASG_1359
BC07361	723772	WMWGASG_1359

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.

Revision 5

- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
  - BC07349
  - BC07358
  - BC07361



Anions

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	723766, 723769, 723829	WMWGASG_1359
BC07344	723766, 723769, 723829	WMWGASG_1359
BC07345	723766, 723769, 723829	WMWGASG_1359
BC07346	723766, 723769, 723829	WMWGASG_1359
BC07347	723766, 723769, 723829	WMWGASG_1359
BC07348	723766, 723769, 723829	WMWGASG_1359
BC07349	723766, 723769, 723829	WMWGASG_1359
BC07350	723766, 723769, 723829	WMWGASG_1359
BC07351	723766, 723769, 723829	WMWGASG_1359
BC07352	723766, 723769, 723829	WMWGASG_1359
BC07353	723767, 723770, 723830	WMWGASG_1359
BC07354	723767, 723770, 723830	WMWGASG_1359
BC07355	723767, 723770, 723830	WMWGASG_1359
BC07356	723767, 723770, 723830	WMWGASG_1359
BC07357	723767, 723770, 723830	WMWGASG_1359
BC07358	723767, 723770, 723830	WMWGASG_1359
BC07359	723767, 723770, 723830	WMWGASG_1359
BC07360	723767, 723770, 723830	WMWGASG_1359
BC07361	723767, 723770, 723830	WMWGASG_1359

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

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.

Revision 5

- 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 and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were analyzed with each 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>
BC07350	Sulfate	10

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

Alkalinity

Gaston Gypsum

WMWGASG\_1359

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07343	724491, 724492	WMWGASG_1359
BC07344	724499, 724500	WMWGASG_1359
BC07345	724499, 724500	WMWGASG_1359
BC07346	724547, 724548	WMWGASG_1359
BC07347	724547, 724548	WMWGASG_1359
BC07348	724547, 724548	WMWGASG_1359
BC07350	724491, 724492	WMWGASG_1359
BC07351	724491, 724492	WMWGASG_1359
BC07352	724499, 724500	WMWGASG_1359
BC07353	724499, 724500	WMWGASG_1359
BC07354	724499, 724500	WMWGASG_1359
BC07355	724499, 724500	WMWGASG_1359
BC07356	724547, 724548	WMWGASG_1359
BC07357	724547, 724548	WMWGASG_1359
BC07359	724547, 724548	WMWGASG_1359
BC07360	724547, 724548	WMWGASG_1359

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

#### General Quality Control Procedures:

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 11:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07343

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 11:09		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 14:24	4/25/22 13:00		10.15	87.1	mg/L	0.70035	4.06	
* Iron, Total	4/22/22 14:24	4/25/22 11:09		1.015	0.0220	mg/L	0.008120	0.0406	J
* Lithium, Total	4/22/22 14:24	4/25/22 11:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 11:09		1.015	20.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:09		1	11.3	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 11:09		1.015	5.29	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 11:09		1.015	2.12	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:35		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/26/22 10:33	4/27/22 10:57		10.15	79.8	mg/L	0.70035	4.06	
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:35		1.015	0.0165	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:35		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:35		1.015	20.8	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:35		1	11.4	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:35		1.015	5.31	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:35		1.015	2.18	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 17:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 17:08		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/18/22 10:35	4/19/22 17:08		1.015	0.000102	mg/L	0.000081	0.000203	J
* Barium, Total	4/18/22 10:35	4/19/22 17:08		1.015	0.0340	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 17:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 17:08		1.015	0.000518	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/18/22 10:35	4/19/22 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	4/18/22 10:35	4/19/22 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/18/22 10:35	4/19/22 17:08		1.015	0.000618	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:08		1.015	0.000259	mg/L	0.000102	0.000203	
* Potassium, Total	4/18/22 10:35	4/19/22 17:08		1.015	0.465	mg/L	0.169505	0.5075	J

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 11:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07343

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	0.000146	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	0.0284	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	0.000471	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	0.000446	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	0.000333	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	0.449	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 12:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:14		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:11	4/19/22 14:11		1	0.306	mg/L as N	0.20	0.3	
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 09:03	4/26/22 09:03		1	287	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	271	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 09:03	4/26/22 09:03		1	286	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 09:03	4/26/22 09:03		1	0.954	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 15:27	4/25/22 15:27		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 11:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07343

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:51	4/15/22 09:51		1	3.23	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 14:55	4/15/22 14:55		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:41	4/19/22 11:41		1	8.36	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	4/12/22 11:02	4/12/22 11:02			477.36	uS/cm			FA
pH	4/12/22 11:02	4/12/22 11:02			6.48	SU			FA
Temperature	4/12/22 11:02	4/12/22 11:02			21.70	C			FA
Turbidity	4/12/22 11:02	4/12/22 11:02			1.99	NTU			FA
Sulfide	4/12/22 11:02	4/12/22 11:02			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 11:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07343

Sample	Analysis	Units	MB	MB				Standard		Rec			Prec Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 11:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07343

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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



# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 11:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07343

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0		
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0		

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 11:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07343

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07351	Alkalinity, Total as CaCO3	mg/L					2.96	50.8	45.0 to 55.0			8.45	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07348	Solids, Dissolved	mg/L	0.0000	25.0			259	48.0	40.0 to 60.0			2.67	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 14:16  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07344

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 11:12		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 14:24	4/25/22 11:12		1.015	4.59	mg/L	0.070035	0.406	
* Iron, Total	4/22/22 14:24	4/25/22 11:12		1.015	0.336	mg/L	0.008120	0.0406	
* Lithium, Total	4/22/22 14:24	4/25/22 11:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 11:12		1.015	0.343	mg/L	0.021315	0.406	J
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:12		1	9.42	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 11:12		1.015	4.40	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 11:12		1.015	0.994	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:38		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/26/22 10:33	4/27/22 09:38		1.015	4.52	mg/L	0.070035	0.406	
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:38		1.015	0.195	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:38		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:38		1.015	0.323	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:38		1	9.24	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:38		1.015	4.32	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:38		1.015	0.996	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 17:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 17:12		1.015	0.0512	mg/L	0.006090	0.01015	
* Arsenic, Total	4/18/22 10:35	4/19/22 17:12		1.015	0.000281	mg/L	0.000081	0.000203	
* Barium, Total	4/18/22 10:35	4/19/22 17:12		1.015	0.00927	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 17:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 17:12		1.015	0.000234	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/18/22 10:35	4/19/22 17:12		1.015	0.000658	mg/L	0.000068	0.000203	
* Lead, Total	4/18/22 10:35	4/19/22 17:12		1.015	0.000226	mg/L	0.000068	0.000203	
* Manganese, Total	4/18/22 10:35	4/19/22 17:12		1.015	0.0806	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:12		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/18/22 10:35	4/19/22 17:12		1.015	0.257	mg/L	0.169505	0.5075	J

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 14:16  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07344

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	0.000198	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	0.00684	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	0.000574	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	0.0672	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	0.244	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:16		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:13	4/19/22 14:13		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 10:56	4/26/22 13:12		1	12.0	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	27.3	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	12.0	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 15:48	4/25/22 15:48		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 14:16  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07344

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:52	4/15/22 09:52		1	1.88	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 14:56	4/15/22 14:56		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:42	4/19/22 11:42		1	1.76	mg/L	0.6	2	J
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	4/12/22 14:13	4/12/22 14:13			27.47	uS/cm			FA
pH	4/12/22 14:13	4/12/22 14:13			5.25	SU			FA
Temperature	4/12/22 14:13	4/12/22 14:13			20.47	C			FA
Turbidity	4/12/22 14:13	4/12/22 14:13			9.73	NTU			FA
Sulfide	4/12/22 14:13	4/12/22 14:13			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 14:16  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07344

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 14:16  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07344

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 14:16  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07344

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0

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



## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 14:16  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07344

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07355	Alkalinity, Total as CaCO3	mg/L					143	50.8	45.0 to 55.0			3.44	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07348	Solids, Dissolved	mg/L	0.0000	25.0			259	48.0	40.0 to 60.0			2.67	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:51  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07345

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 11:15		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	4/22/22 14:24	4/25/22 13:03		10.15	55.1	mg/L	0.70035	4.06		
* Iron, Total	4/22/22 14:24	4/25/22 11:15		1.015	0.0103	mg/L	0.008120	0.0406	J	
* Lithium, Total	4/22/22 14:24	4/25/22 11:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 11:15		1.015	2.59	mg/L	0.021315	0.406		
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:15		1	7.60	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 11:15		1.015	3.55	mg/L	0.02030	0.25375		
* Sodium, Total	4/22/22 14:24	4/25/22 11:15		1.015	4.72	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:41		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	4/26/22 10:33	4/27/22 11:01		10.15	54.1	mg/L	0.70035	4.06		
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:41		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:41		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:41		1.015	2.60	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:41		1	7.47	mg/L				
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:41		1.015	3.49	mg/L	0.02030	0.25375		
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:41		1.015	4.74	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 17:15		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 17:15		1.015	0.0187	mg/L	0.006090	0.01015		
* Arsenic, Total	4/18/22 10:35	4/19/22 17:15		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	4/18/22 10:35	4/19/22 17:15		1.015	0.0309	mg/L	0.000102	0.000203		
* Beryllium, Total	4/18/22 10:35	4/19/22 17:15		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 17:15		1.015	0.000249	mg/L	0.000203	0.001015	J	
* Cobalt, Total	4/18/22 10:35	4/19/22 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	4/18/22 10:35	4/19/22 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 17:15		1.015	0.0169	mg/L	0.000152	0.000203		
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:15		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	4/18/22 10:35	4/19/22 17:15		1.015	7.94	mg/L	0.169505	0.5075		

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:51  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07345

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:15		1.015	0.000510	mg/L	0.000508	0.001015	J
* Thallium, Total	4/18/22 10:35	4/19/22 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	0.0253	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	0.000260	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	0.00224	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	7.74	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:18		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:15	4/19/22 14:15		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 10:56	4/26/22 13:12		1	138	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	156	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	138	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 16:03	4/25/22 16:03		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:51  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07345

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:53	4/15/22 09:53		1	2.67	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 14:57	4/15/22 14:57		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:43	4/19/22 11:43		1	7.36	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	4/12/22 15:48	4/12/22 15:48			250.86	uS/cm			FA
pH	4/12/22 15:48	4/12/22 15:48			5.57	SU			FA
Temperature	4/12/22 15:48	4/12/22 15:48			20.83	C			FA
Turbidity	4/12/22 15:48	4/12/22 15:48			1.12	NTU			FA
Sulfide	4/12/22 15:48	4/12/22 15:48			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:51  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07345

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:51  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07345

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:51  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07345

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:51  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07345

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07355	Alkalinity, Total as CaCO3	mg/L					143	50.8	45.0 to 55.0			3.44	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07348	Solids, Dissolved	mg/L	0.0000	25.0			259	48.0	40.0 to 60.0			2.67	10.0

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



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 08:43  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07346

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 11:18		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 14:24	4/25/22 13:06		10.15	58.9	mg/L	0.70035	4.06	
* Iron, Total	4/22/22 14:24	4/25/22 11:18		1.015	0.0362	mg/L	0.008120	0.0406	J
* Lithium, Total	4/22/22 14:24	4/25/22 11:18		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 11:18		1.015	8.73	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:18		1	9.89	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 11:18		1.015	4.62	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 11:18		1.015	5.97	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:44		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/26/22 10:33	4/27/22 11:04		10.15	55.5	mg/L	0.70035	4.06	
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:44		1.015	0.0164	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:44		1.015	8.90	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:44		1	9.84	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:44		1.015	4.60	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:44		1.015	6.10	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 17:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 17:19		1.015	0.0336	mg/L	0.006090	0.01015	
* Arsenic, Total	4/18/22 10:35	4/19/22 17:19		1.015	0.000143	mg/L	0.000081	0.000203	J
* Barium, Total	4/18/22 10:35	4/19/22 17:19		1.015	0.0217	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 17:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 17:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 17:19		1.015	0.000699	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/18/22 10:35	4/19/22 17:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	4/18/22 10:35	4/19/22 17:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/18/22 10:35	4/19/22 17:19		1.015	0.00854	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:19		1.015	0.000247	mg/L	0.000102	0.000203	
* Potassium, Total	4/18/22 10:35	4/19/22 17:19		1.015	0.634	mg/L	0.169505	0.5075	

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 08:43  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07346

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 17:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	0.000169	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	0.0173	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	0.000719	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	0.00686	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	0.000215	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	0.651	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:21		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:17	4/19/22 14:17		1	0.271	mg/L as N	0.20	0.3	J
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/27/22 07:52	4/27/22 07:52		1	183	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	187	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/27/22 07:52	4/27/22 07:52		1	181	mg/L			
Carbonate Alkalinity, (calc.)	4/27/22 07:52	4/27/22 07:52		1	1.59	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 16:24	4/25/22 16:24		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 08:43  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07346

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:55	4/15/22 09:55		1	2.42	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 14:58	4/15/22 14:58		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:44	4/19/22 11:44		1	2.44	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	4/13/22 08:40	4/13/22 08:40			320.94	uS/cm			FA
pH	4/13/22 08:40	4/13/22 08:40			7.40	SU			FA
Temperature	4/13/22 08:40	4/13/22 08:40			19.31	C			FA
Turbidity	4/13/22 08:40	4/13/22 08:40			3.8	NTU			FA
Sulfide	4/13/22 08:40	4/13/22 08:40			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 08:43  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07346

Sample	Analysis	Units	MB	MB				Standard		Rec			Prec Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 08:43  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07346

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 08:43  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07346

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 08:43  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07346

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07360	Alkalinity, Total as CaCO3	mg/L					241	50.9	45.0 to 55.0			7.76	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07348	Solids, Dissolved	mg/L	0.0000	25.0			259	48.0	40.0 to 60.0			2.67	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:00  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07347

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 11:21		1.015	0.0353	mg/L	0.030000	0.1015	J	
* Calcium, Total	4/22/22 14:24	4/25/22 13:10		10.15	47.5	mg/L	0.70035	4.06		
* Iron, Total	4/22/22 14:24	4/25/22 11:21		1.015	0.216	mg/L	0.008120	0.0406		
* Lithium, Total	4/22/22 14:24	4/25/22 11:21		1.015	0.00966	mg/L	0.007105	0.01999956	J	
* Magnesium, Total	4/22/22 14:24	4/25/22 11:21		1.015	22.1	mg/L	0.021315	0.406		
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:21		1	20.1	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 11:21		1.015	9.37	mg/L	0.02030	0.25375		
* Sodium, Total	4/22/22 14:24	4/25/22 11:21		1.015	9.17	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:47		1.015	0.0355	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	4/26/22 10:33	4/27/22 11:08		10.15	44.8	mg/L	0.70035	4.06		
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:47		1.015	0.213	mg/L	0.008120	0.0406		
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:47		1.015	0.00990	mg/L	0.007105	0.01999956	J	
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:47		1.015	22.5	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:47		1	20.1	mg/L				
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:47		1.015	9.37	mg/L	0.02030	0.25375		
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:47		1.015	9.24	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	4/18/22 10:35	4/19/22 17:22		1.015	0.00248	mg/L	0.000081	0.000203		
* Barium, Total	4/18/22 10:35	4/19/22 18:41		5.075	2.68	mg/L	0.000508	0.001015		
* Beryllium, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 17:22		1.015	0.00661	mg/L	0.000152	0.000203		
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:22		1.015	0.00330	mg/L	0.000102	0.000203		
* Potassium, Total	4/18/22 10:35	4/19/22 17:22		1.015	1.07	mg/L	0.169505	0.5075		

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

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



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:00  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07347

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 17:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	0.00239	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/18/22 10:40	4/19/22 14:22		5.075	2.10	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	0.00584	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	0.00306	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	1.05	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:23		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:19	4/19/22 14:19		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/27/22 08:00	4/27/22 08:00		1	224	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	217	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/27/22 08:00	4/27/22 08:00		1	222	mg/L			
Carbonate Alkalinity, (calc.)	4/27/22 08:00	4/27/22 08:00		1	1.82	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 16:43	4/25/22 16:43		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:00  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07347

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:56	4/15/22 09:56		1	2.17	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:00	4/15/22 15:00		1	0.307	mg/L	0.06	0.125	
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:45	4/19/22 11:45		1	4.24	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	4/13/22 09:57	4/13/22 09:57			379.96	uS/cm			FA
pH	4/13/22 09:57	4/13/22 09:57			7.50	SU			FA
Temperature	4/13/22 09:57	4/13/22 09:57			20.05	C			FA
Turbidity	4/13/22 09:57	4/13/22 09:57			1.56	NTU			FA
Sulfide	4/13/22 09:57	4/13/22 09:57			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:00  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07347

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:00  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07347

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:00  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07347

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0		
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0		

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:00  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07347

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07360	Alkalinity, Total as CaCO3	mg/L					241	50.9	45.0 to 55.0			7.76	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07348	Solids, Dissolved	mg/L	0.0000	25.0			259	48.0	40.0 to 60.0			2.67	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:59  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07348

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 11:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 14:24	4/25/22 13:13		10.15	91.8	mg/L	0.70035	4.06	
* Iron, Total	4/22/22 14:24	4/25/22 11:24		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/22/22 14:24	4/25/22 11:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 11:24		1.015	10.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:24		1	9.84	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 11:24		1.015	4.60	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 11:24		1.015	3.31	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:50		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/26/22 10:33	4/27/22 11:11		10.15	87.8	mg/L	0.70035	4.06	
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:50		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:50		1.015	10.6	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:50		1	9.74	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:50		1.015	4.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:50		1.015	3.35	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 17:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 17:26		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/18/22 10:35	4/19/22 17:26		1.015	0.000141	mg/L	0.000081	0.000203	J
* Barium, Total	4/18/22 10:35	4/19/22 17:26		1.015	0.0415	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 17:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 17:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 17:26		1.015	0.000523	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/18/22 10:35	4/19/22 17:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	4/18/22 10:35	4/19/22 17:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/18/22 10:35	4/19/22 17:26		1.015	0.00175	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:26		1.015	0.000210	mg/L	0.000102	0.000203	
* Potassium, Total	4/18/22 10:35	4/19/22 17:26		1.015	0.874	mg/L	0.169505	0.5075	

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:59  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07348

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 17:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	0.000126	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	0.0338	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	0.000492	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	0.0000716	mg/L	0.000068	0.000203	J
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	0.000164	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	0.876	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:25		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:20	4/19/22 14:20		1	0.419	mg/L as N	0.20	0.3	
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	1/8/00 08:10	4/27/22 09:02		1	278	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	266	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	1/8/00 08:10	4/27/22 09:02		1	276	mg/L			
Carbonate Alkalinity, (calc.)	1/8/00 08:10	4/27/22 09:02		1	1.80	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 17:01	4/25/22 17:01		1	Not Detected	mg/L	1.00	2	U

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

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



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:59  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07348

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:57	4/15/22 09:57		1	3.01	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:01	4/15/22 15:01		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:47	4/19/22 11:47		1	7.27	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	4/13/22 10:56	4/13/22 10:56			459.11	uS/cm			FA
pH	4/13/22 10:56	4/13/22 10:56			6.84	SU			FA
Temperature	4/13/22 10:56	4/13/22 10:56			19.83	C			FA
Turbidity	4/13/22 10:56	4/13/22 10:56			0.85	NTU			FA
Sulfide	4/13/22 10:56	4/13/22 10:56			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:59  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07348

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:59  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07348

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:59  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07348

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:59  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07348

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07360	Alkalinity, Total as CaCO3	mg/L					241	50.9	45.0 to 55.0			7.76	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07348	Solids, Dissolved	mg/L	0.0000	25.0			259	48.0	40.0 to 60.0			2.67	10.0

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

# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-2

**Location Code:** WMWGASGFB  
**Collected:** 4/13/22 11:25  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07349

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 11:27		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	4/22/22 14:24	4/25/22 11:27		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	4/22/22 14:24	4/25/22 11:27		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	4/22/22 14:24	4/25/22 11:27		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 11:27		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:27		1	Not Detected	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 11:27		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	4/22/22 14:24	4/25/22 11:27		1.015	Not Detected	mg/L	0.03045	0.406	U	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Beryllium, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 17:29		1.015	0.000640	mg/L	0.000203	0.001015	J	
* Cobalt, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000152	0.000203	U	
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	4/18/22 10:35	4/19/22 17:29		1.015	Not Detected	mg/L	0.000068	0.000203	U	
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>								
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:28		1	Not Detected	mg/L	0.0003	0.0005	U	
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>								
* Nitrogen, Nitrate/Nitrite	4/19/22 14:22	4/19/22 14:22		1	Not Detected	mg/L as N	0.20	0.3	U	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>								
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	Not Detected	mg/L		25	U	

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

**Comments:**

# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-2

**Location Code:** WMWGASGFB

**Collected:** 4/13/22 11:25

**Customer ID:**

**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07349

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 17:21	4/25/22 17:21		1	Not Detected	mg/L	1.00	2	U
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:58	4/15/22 09:58		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:02	4/15/22 15:02		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:48	4/19/22 11:48		1	Not Detected	mg/L	0.6	2	U

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

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**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 4/13/22 11:25

**Customer ID:**

**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Field Blank-2

**Laboratory ID Number:** BC07349

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0

**Comments:**



# Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 4/13/22 11:25

**Customer ID:**

**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Field Blank-2

**Laboratory ID Number:** BC07349

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0		
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0		
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0		

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 4/13/22 11:25

**Customer ID:**

**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Field Blank-2

**Laboratory ID Number:** BC07349

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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**Comments:**

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 09:35  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07350

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 11:30		1.015	0.0481	mg/L	0.030000	0.1015	J
* Calcium, Total	4/22/22 14:24	4/25/22 13:17		10.15	94.1	mg/L	0.70035	4.06	
* Iron, Total	4/22/22 14:24	4/25/22 11:30		1.015	1.73	mg/L	0.008120	0.0406	
* Lithium, Total	4/22/22 14:24	4/25/22 11:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 11:30		1.015	21.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:30		1	10.8	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 11:30		1.015	5.04	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 11:30		1.015	18.6	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:53		1.015	0.0477	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/26/22 10:33	4/27/22 11:14		10.15	89.2	mg/L	0.70035	4.06	
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:53		1.015	1.70	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:53		1.015	21.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:53		1	10.8	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:53		1.015	5.03	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:53		1.015	18.5	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 17:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 17:33		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/18/22 10:35	4/19/22 17:33		1.015	0.000896	mg/L	0.000081	0.000203	
* Barium, Total	4/18/22 10:35	4/19/22 17:33		1.015	0.0666	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 17:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 17:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 17:33		1.015	0.000287	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/18/22 10:35	4/19/22 17:33		1.015	0.00215	mg/L	0.000068	0.000203	
* Lead, Total	4/18/22 10:35	4/19/22 17:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/18/22 10:35	4/19/22 17:33		1.015	0.601	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:33		1.015	0.000121	mg/L	0.000102	0.000203	J
* Potassium, Total	4/18/22 10:35	4/19/22 17:33		1.015	0.297	mg/L	0.169505	0.5075	J

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 09:35  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07350

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 17:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	0.000856	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	0.0569	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	0.00220	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	0.572	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	0.000139	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	0.279	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:30		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:24	4/19/22 14:24		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 09:10	4/26/22 09:10		1	198	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	400	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 09:10	4/26/22 09:10		1	196	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 09:10	4/26/22 09:10		1	1.80	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 17:40	4/25/22 17:40		1	1.62	mg/L	1.00	2	J

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 09:35  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07350

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:59	4/15/22 09:59		1	7.35	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:03	4/15/22 15:03		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:55	4/19/22 11:55		10	145	mg/L	6.0	20	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/12/22 09:31	4/12/22 09:31			599.71	uS/cm			FA
pH	4/12/22 09:31	4/12/22 09:31			6.32	SU			FA
Temperature	4/12/22 09:31	4/12/22 09:31			25.39	C			FA
Turbidity	4/12/22 09:31	4/12/22 09:31			1.24	NTU			FA
Sulfide	4/12/22 09:31	4/12/22 09:31			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 09:35  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07350

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 09:35  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07350

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 09:35  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07350

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0

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



## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 09:35  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07350

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07351	Alkalinity, Total as CaCO3	mg/L					2.96	50.8	45.0 to 55.0			8.45	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 11:15  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07351

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 11:33		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 14:24	4/25/22 11:33		1.015	0.516	mg/L	0.070035	0.406	
* Iron, Total	4/22/22 14:24	4/25/22 11:33		1.015	0.0173	mg/L	0.008120	0.0406	J
* Lithium, Total	4/22/22 14:24	4/25/22 11:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 11:33		1.015	0.405	mg/L	0.021315	0.406	J
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:33		1	8.77	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 11:33		1.015	4.10	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 11:33		1.015	2.65	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/26/22 10:33	4/27/22 09:56		1.015	0.517	mg/L	0.070035	0.406	
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:56		1.015	0.0160	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:56		1.015	0.363	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:56		1	8.90	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:56		1.015	4.16	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:56		1.015	2.78	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 17:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 17:37		1.015	0.102	mg/L	0.006090	0.01015	
* Arsenic, Total	4/18/22 10:35	4/19/22 17:37		1.015	0.000109	mg/L	0.000081	0.000203	J
* Barium, Total	4/18/22 10:35	4/19/22 17:37		1.015	0.0214	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 17:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 17:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 17:37		1.015	0.000221	mg/L	0.000203	0.001015	J
* Cobalt, Total	4/18/22 10:35	4/19/22 17:37		1.015	0.000665	mg/L	0.000068	0.000203	
* Lead, Total	4/18/22 10:35	4/19/22 17:37		1.015	0.000396	mg/L	0.000068	0.000203	
* Manganese, Total	4/18/22 10:35	4/19/22 17:37		1.015	0.00805	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:37		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/18/22 10:35	4/19/22 17:37		1.015	Not Detected	mg/L	0.169505	0.5075	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 11:15  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07351

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 17:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	0.0203	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	0.0157	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	0.000664	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	0.000291	mg/L	0.000068	0.000203	
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	0.00676	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:32		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:26	4/19/22 14:26		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 09:31	4/26/22 09:31		1	2.72	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 09:31	4/26/22 09:31		1	2.72	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 09:31	4/26/22 09:31		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 17:58	4/25/22 17:58		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 11:15  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07351

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:00	4/15/22 10:00		1	3.38	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:04	4/15/22 15:04		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:50	4/19/22 11:50		1	Not Detected	mg/L	0.6	2	U
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/12/22 11:11	4/12/22 11:11			32.70	uS/cm			FA
pH	4/12/22 11:11	4/12/22 11:11			4.38	SU			FA
Temperature	4/12/22 11:11	4/12/22 11:11			27.16	C			FA
Turbidity	4/12/22 11:11	4/12/22 11:11			1.39	NTU			FA
Sulfide	4/12/22 11:11	4/12/22 11:11			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 11:15  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07351

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 11:15  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07351

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 11:15  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07351

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 11:15  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07351

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07351	Alkalinity, Total as CaCO3	mg/L					2.96	50.8	45.0 to 55.0			8.45	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 12:55  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07352

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 11:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 14:24	4/25/22 13:20		10.15	71.2	mg/L	0.70035	4.06	
* Iron, Total	4/22/22 14:24	4/25/22 11:36		1.015	0.0560	mg/L	0.008120	0.0406	
* Lithium, Total	4/22/22 14:24	4/25/22 11:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 11:36		1.015	9.14	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:36		1	7.21	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 11:36		1.015	3.37	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 11:36		1.015	5.12	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 09:59		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/26/22 10:33	4/27/22 11:18		10.15	63.6	mg/L	0.70035	4.06	
* Iron, Dissolved	4/26/22 10:33	4/27/22 09:59		1.015	0.0650	mg/L	0.008120	0.0406	
* Lithium, Dissolved	4/26/22 10:33	4/27/22 09:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 09:59		1.015	9.15	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 09:59		1	7.40	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 09:59		1.015	3.46	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 09:59		1.015	5.39	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 17:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 17:40		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/18/22 10:35	4/19/22 17:40		1.015	0.000431	mg/L	0.000081	0.000203	
* Barium, Total	4/18/22 10:35	4/19/22 17:40		1.015	0.0192	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 17:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 17:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 17:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	4/18/22 10:35	4/19/22 17:40		1.015	0.000601	mg/L	0.000068	0.000203	
* Lead, Total	4/18/22 10:35	4/19/22 17:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/18/22 10:35	4/19/22 17:40		1.015	0.315	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 17:40		1.015	0.000272	mg/L	0.000102	0.000203	
* Potassium, Total	4/18/22 10:35	4/19/22 17:40		1.015	0.619	mg/L	0.169505	0.5075	

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 12:55  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07352

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 17:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 17:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	0.000492	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	0.0161	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	0.000222	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	0.000714	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	0.323	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	0.000282	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	0.618	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:35		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:28	4/19/22 14:28		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 10:56	4/26/22 13:12		1	206	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	214	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	205	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	0.902	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 18:18	4/25/22 18:18		1	1.45	mg/L	1.00	2	J

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 12:55  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07352

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:02	4/15/22 10:02		1	3.29	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:06	4/15/22 15:06		1	0.0724	mg/L	0.06	0.125	J
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:51	4/19/22 11:51		1	5.75	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/12/22 12:53	4/12/22 12:53			379.98	uS/cm			FA
pH	4/12/22 12:53	4/12/22 12:53			6.73	SU			FA
Temperature	4/12/22 12:53	4/12/22 12:53			30.35	C			FA
Turbidity	4/12/22 12:53	4/12/22 12:53			1.05	NTU			FA
Sulfide	4/12/22 12:52	4/12/22 12:52			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 12:55  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07352

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07352	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.111	0.111	0.114	0.0850 to 0.115	111	70.0 to 130	0.00	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07352	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.110	0.112	0.104	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07352	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07352	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.132	0.134	0.110	0.0850 to 0.115	113	70.0 to 130	1.50	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07352	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.107	0.109	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07352	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.05	1.04	1.02	0.850 to 1.15	105	70.0 to 130	0.957	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07352	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.106	0.106	0.111	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07352	Calcium, Total	mg/L	0.00105	0.152	5.00	76.3	75.2	4.89	4.25 to 5.75	102	70.0 to 130	1.45	20.0
BC07352	Chloride	mg/L	0.0507	1.00	10.0	13.9	13.7	9.83	9.00 to 11.0	106	80.0 to 120	1.45	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07352	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0987	0.0966	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.15	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07352	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.102	0.101	0.107	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07352	Fluoride	mg/L	-0.0248	0.125	2.50	2.63	2.65	2.62	2.25 to 2.75	102	80.0 to 120	0.758	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 12:55  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07352

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07352	Iron, Total	mg/L	0.000618	0.0176	0.2	0.257	0.256	0.198	0.170 to 0.230	100	70.0 to 130	0.390	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07352	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.114	0.114	0.114	0.0850 to 0.115	114	70.0 to 130	0.00	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07352	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.204	0.204	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07352	Magnesium, Total	mg/L	0.00546	0.0462	5.00	14.2	14.3	5.18	4.25 to 5.75	101	70.0 to 130	0.702	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07352	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.421	0.424	0.109	0.0850 to 0.115	106	70.0 to 130	0.710	20.0
BC07352	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00343	0.00348	0.00387	0.00340 to 0.00460	85.8	70.0 to 130	1.45	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07352	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07352	Potassium, Total	mg/L	-0.00861	0.367	10.0	10.4	10.5	10.1	8.50 to 11.5	97.8	70.0 to 130	0.957	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07352	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.106	0.108	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07352	Silicon, Total	mg/L	0.000115	0.0440	1.00	4.41	4.40	1.01	0.850 to 1.15	104	70.0 to 130	0.227	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07352	Sodium, Total	mg/L	0.00015	0.0660	5.00	10.3	10.3	5.16	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BC07352	Sulfate	mg/L	0.0352	2.0	20.0	26.6	27.1	20.0	18.0 to 22.0	104	80.0 to 120	1.86	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 12:55  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07352

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07352	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.109	0.113	0.111	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BC07352	Total Organic Carbon	mg/L	0.250	1.00	10.0	11.6	11.4	25.5		102	80.0 to 120	1.74	20.0

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 12:55  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07352

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07355	Alkalinity, Total as CaCO3	mg/L					143	50.8	45.0 to 55.0			3.44	10.0
BC07352	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.06	0.200	2.00	2.00	-0.051	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 14:28  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07353

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 11:50		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	4/22/22 14:24	4/25/22 13:37		10.15	54.4	mg/L	0.70035	4.06		
* Iron, Total	4/22/22 14:24	4/25/22 11:50		1.015	0.404	mg/L	0.008120	0.0406		
* Lithium, Total	4/22/22 14:24	4/25/22 11:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 11:50		1.015	10.5	mg/L	0.021315	0.406		
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:50		1	8.67	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 11:50		1.015	4.05	mg/L	0.02030	0.25375		
* Sodium, Total	4/22/22 14:24	4/25/22 11:50		1.015	1.33	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	4/26/22 10:33	4/27/22 10:01		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	4/26/22 10:33	4/27/22 11:21		10.15	52.2	mg/L	0.70035	4.06		
* Iron, Dissolved	4/26/22 10:33	4/27/22 10:01		1.015	0.303	mg/L	0.008120	0.0406		
* Lithium, Dissolved	4/26/22 10:33	4/27/22 10:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 10:01		1.015	10.8	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 10:01		1	8.69	mg/L				
Silicon, Dissolved	4/26/22 10:33	4/27/22 10:01		1.015	4.06	mg/L	0.02030	0.25375		
* Sodium, Dissolved	4/26/22 10:33	4/27/22 10:01		1.015	1.36	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 18:02		1.015	0.0152	mg/L	0.006090	0.01015		
* Arsenic, Total	4/18/22 10:35	4/19/22 18:02		1.015	0.00124	mg/L	0.000081	0.000203		
* Barium, Total	4/18/22 10:35	4/19/22 18:02		1.015	0.0294	mg/L	0.000102	0.000203		
* Beryllium, Total	4/18/22 10:35	4/19/22 18:02		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 18:02		1.015	0.000346	mg/L	0.000203	0.001015	J	
* Cobalt, Total	4/18/22 10:35	4/19/22 18:02		1.015	0.0000746	mg/L	0.000068	0.000203	J	
* Lead, Total	4/18/22 10:35	4/19/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 18:02		1.015	0.116	mg/L	0.000152	0.000203		
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:02		1.015	0.00347	mg/L	0.000102	0.000203		
* Potassium, Total	4/18/22 10:35	4/19/22 18:02		1.015	1.36	mg/L	0.169505	0.5075		

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

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



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 14:28  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07353

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	0.00110	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	0.0239	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	0.000263	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	0.000112	mg/L	0.000068	0.000203	J
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	0.0894	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	0.00343	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	1.34	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:47		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:37	4/19/22 14:37		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 10:56	4/26/22 13:12		1	182	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	176	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	179	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	2.44	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 19:43	4/25/22 19:43		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 14:28  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07353

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:14	4/15/22 10:14		1	1.54	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:18	4/15/22 15:18		1	0.0621	mg/L	0.06	0.125	J
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:06	4/19/22 12:06		1	3.13	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/12/22 14:24	4/12/22 14:24			294.59	uS/cm			FA
pH	4/12/22 14:24	4/12/22 14:24			7.22	SU			FA
Temperature	4/12/22 14:24	4/12/22 14:24			28.08	C			FA
Turbidity	4/12/22 14:24	4/12/22 14:24			2.91	NTU			FA
Sulfide	4/12/22 14:24	4/12/22 14:24			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 14:28  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07353

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC07353	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0986	0.0979	0.102	0.0850 to 0.115	98.6	70.0 to 130	0.712	20.0
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07353	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0905	0.0947	0.0867	0.0850 to 0.115	90.5	70.0 to 130	4.54	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07353	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0970	0.0975	0.102	0.0850 to 0.115	95.9	70.0 to 130	0.514	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07353	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.114	0.119	0.0908	0.0850 to 0.115	90.1	70.0 to 130	4.29	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07353	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0905	0.0879	0.0914	0.0850 to 0.115	90.5	70.0 to 130	2.91	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07353	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.02	1.03	1.03	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07353	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0980	0.0990	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.02	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07353	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	55.7	56.2	4.85	4.25 to 5.75	70.0	70.0 to 130	0.894	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07353	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0967	0.0957	0.0979	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07353	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0984	0.0972	0.0982	0.0850 to 0.115	98.3	70.0 to 130	1.23	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07353	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.498	0.509	0.207	0.170 to 0.230	97.5	70.0 to 130	2.18	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 14:28  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07353

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07353	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.102	0.0985	0.0986	0.0850 to 0.115	102	70.0 to 130	3.49	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07353	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.206	0.203	0.211	0.170 to 0.230	103	70.0 to 130	1.47	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07353	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	15.9	15.9	5.36	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07353	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.185	0.185	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.00	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07353	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0992	0.0996	0.0949	0.0850 to 0.115	95.8	70.0 to 130	0.402	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07353	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	11.2	11.1	10.2	8.50 to 11.5	98.6	70.0 to 130	0.897	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07353	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07353	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	5.09	5.12	1.03	0.850 to 1.15	103	70.0 to 130	0.588	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07353	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	6.60	6.52	5.39	4.25 to 5.75	105	70.0 to 130	1.22	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07353	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.103	0.0998	0.0996	0.0850 to 0.115	103	70.0 to 130	3.16	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 14:28  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07353

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115	110	70.0 to 130	1.80	20.0		
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6		103	80.0 to 120	0.00	20.0		

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 14:28  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07353

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07355	Alkalinity, Total as CaCO3	mg/L					143	50.8	45.0 to 55.0			3.44	10.0
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:45  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07354

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 11:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 14:24	4/25/22 13:40		10.15	50.4	mg/L	0.70035	4.06	
* Iron, Total	4/22/22 14:24	4/25/22 11:53		1.015	0.172	mg/L	0.008120	0.0406	
* Lithium, Total	4/22/22 14:24	4/25/22 11:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 11:53		1.015	6.30	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:53		1	9.57	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 11:53		1.015	4.47	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 11:53		1.015	2.86	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 10:16		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/26/22 10:33	4/27/22 11:38		10.15	47.8	mg/L	0.70035	4.06	
* Iron, Dissolved	4/26/22 10:33	4/27/22 10:16		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/26/22 10:33	4/27/22 10:16		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 10:16		1.015	6.48	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 10:16		1	9.54	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 10:16		1.015	4.46	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 10:16		1.015	2.82	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 18:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 18:05		1.015	0.0171	mg/L	0.006090	0.01015	
* Arsenic, Total	4/18/22 10:35	4/19/22 18:05		1.015	0.000178	mg/L	0.000081	0.000203	J
* Barium, Total	4/18/22 10:35	4/19/22 18:05		1.015	0.0252	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 18:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 18:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 18:05		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	4/18/22 10:35	4/19/22 18:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	4/18/22 10:35	4/19/22 18:05		1.015	0.000112	mg/L	0.000068	0.000203	J
* Manganese, Total	4/18/22 10:35	4/19/22 18:05		1.015	0.0157	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:05		1.015	0.000213	mg/L	0.000102	0.000203	
* Potassium, Total	4/18/22 10:35	4/19/22 18:05		1.015	0.703	mg/L	0.169505	0.5075	

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:45  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07354

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 18:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 18:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	0.000107	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	0.0205	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	0.000106	mg/L	0.000068	0.000203	J
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	0.0172	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	0.000253	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	0.681	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:49		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:39	4/19/22 14:39		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 10:56	4/26/22 13:12		1	151	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	155	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	149	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	1.89	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 20:04	4/25/22 20:04		1	Not Detected	mg/L	1.00	2	U

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

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



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:45  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07354

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:15	4/15/22 10:15		1	1.91	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:19	4/15/22 15:19		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:07	4/19/22 12:07		1	4.09	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/12/22 15:42	4/12/22 15:42			240.70	uS/cm			FA
pH	4/12/22 15:42	4/12/22 15:42			6.22	SU			FA
Temperature	4/12/22 15:42	4/12/22 15:42			28.12	C			FA
Turbidity	4/12/22 15:42	4/12/22 15:42			4.95	NTU			FA
Sulfide	4/12/22 15:42	4/12/22 15:42			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:45  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07354

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC07360	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0994	0.0976	0.102	0.0850 to 0.115	99.4	70.0 to 130	1.83	20.0
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07360	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0948	0.0962	0.0867	0.0850 to 0.115	94.8	70.0 to 130	1.47	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07360	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0979	0.0963	0.102	0.0850 to 0.115	97.7	70.0 to 130	1.65	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07360	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.112	0.112	0.0908	0.0850 to 0.115	89.3	70.0 to 130	0.00	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07360	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0877	0.0882	0.0914	0.0850 to 0.115	87.7	70.0 to 130	0.569	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07360	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07360	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0986	0.0991	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.506	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07360	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	84.5	90.8	4.85	4.25 to 5.75	52.0	70.0 to 130	7.19	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07360	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0973	0.0957	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.66	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07360	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0998	0.0987	0.0982	0.0850 to 0.115	99.6	70.0 to 130	1.11	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07360	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.202	0.202	0.207	0.170 to 0.230	101	70.0 to 130	0.00	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:45  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07354

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07360	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.0995	0.0995	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07360	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.205	0.209	0.211	0.170 to 0.230	102	70.0 to 130	1.93	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07360	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	13.7	13.6	5.36	4.25 to 5.75	106	70.0 to 130	0.733	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07360	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.187	0.182	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.71	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07360	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0960	0.0965	0.0949	0.0850 to 0.115	95.7	70.0 to 130	0.519	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07360	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	10.2	10.1	10.2	8.50 to 11.5	99.6	70.0 to 130	0.985	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07360	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07360	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	4.47	4.47	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07360	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	9.67	9.89	5.39	4.25 to 5.75	102	70.0 to 130	2.25	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07360	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.102	0.100	0.0996	0.0850 to 0.115	102	70.0 to 130	1.98	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:45  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07354

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115	110	70.0 to 130	1.80	20.0		
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6		103	80.0 to 120	0.00	20.0		

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:45  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07354

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07355	Alkalinity, Total as CaCO3	mg/L					143	50.8	45.0 to 55.0			3.44	10.0
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:45  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07355

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 11:56		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	4/22/22 14:24	4/25/22 13:44		10.15	49.4	mg/L	0.70035	4.06		
* Iron, Total	4/22/22 14:24	4/25/22 11:56		1.015	0.0943	mg/L	0.008120	0.0406		
* Lithium, Total	4/22/22 14:24	4/25/22 11:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 11:56		1.015	6.22	mg/L	0.021315	0.406		
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:56		1	9.61	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 11:56		1.015	4.49	mg/L	0.02030	0.25375		
* Sodium, Total	4/22/22 14:24	4/25/22 11:56		1.015	2.80	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	4/26/22 10:33	4/27/22 10:19		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	4/26/22 10:33	4/27/22 12:10		10.15	46.3	mg/L	0.70035	4.06		
* Iron, Dissolved	4/26/22 10:33	4/27/22 10:19		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	4/26/22 10:33	4/27/22 10:19		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 10:19		1.015	6.43	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 10:19		1	9.57	mg/L				
Silicon, Dissolved	4/26/22 10:33	4/27/22 10:19		1.015	4.47	mg/L	0.02030	0.25375		
* Sodium, Dissolved	4/26/22 10:33	4/27/22 10:19		1.015	2.82	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 18:09		1.015	0.0210	mg/L	0.006090	0.01015		
* Arsenic, Total	4/18/22 10:35	4/19/22 18:09		1.015	0.000122	mg/L	0.000081	0.000203	J	
* Barium, Total	4/18/22 10:35	4/19/22 18:09		1.015	0.0255	mg/L	0.000102	0.000203		
* Beryllium, Total	4/18/22 10:35	4/19/22 18:09		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 18:09		1.015	0.000220	mg/L	0.000203	0.001015	J	
* Cobalt, Total	4/18/22 10:35	4/19/22 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	4/18/22 10:35	4/19/22 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 18:09		1.015	0.0150	mg/L	0.000152	0.000203		
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:09		1.015	0.000237	mg/L	0.000102	0.000203		
* Potassium, Total	4/18/22 10:35	4/19/22 18:09		1.015	0.689	mg/L	0.169505	0.5075		

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:45  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07355

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	0.000148	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	0.0208	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	0.0000877	mg/L	0.000068	0.000203	J
* Lead, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	0.0164	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	0.000235	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	0.681	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:51		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:41	4/19/22 14:41		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/26/22 10:56	4/26/22 13:12		1	148	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	159	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	147	mg/L			
Carbonate Alkalinity, (calc.)	4/26/22 10:56	4/26/22 13:12		1	0.956	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 20:22	4/25/22 20:22		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/12/22 15:45  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07355

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:17	4/15/22 10:17		1	1.94	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:21	4/15/22 15:21		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:08	4/19/22 12:08		1	4.05	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/12/22 15:42	4/12/22 15:42			240.70	uS/cm			FA
pH	4/12/22 15:42	4/12/22 15:42			6.22	SU			FA
Temperature	4/12/22 15:42	4/12/22 15:42			28.12	C			FA
Turbidity	4/12/22 15:42	4/12/22 15:42			4.95	NTU			FA
Sulfide	4/12/22 15:42	4/12/22 15:42			0	mg/L			FA

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

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



# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:45  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07355

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07360	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0994	0.0976	0.102	0.0850 to 0.115	99.4	70.0 to 130	1.83	20.0
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07360	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0948	0.0962	0.0867	0.0850 to 0.115	94.8	70.0 to 130	1.47	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07360	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0979	0.0963	0.102	0.0850 to 0.115	97.7	70.0 to 130	1.65	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07360	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.112	0.112	0.0908	0.0850 to 0.115	89.3	70.0 to 130	0.00	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07360	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0877	0.0882	0.0914	0.0850 to 0.115	87.7	70.0 to 130	0.569	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07360	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07360	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0986	0.0991	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.506	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07360	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	84.5	90.8	4.85	4.25 to 5.75	52.0	70.0 to 130	7.19	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07360	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0973	0.0957	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.66	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07360	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0998	0.0987	0.0982	0.0850 to 0.115	99.6	70.0 to 130	1.11	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07360	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.202	0.202	0.207	0.170 to 0.230	101	70.0 to 130	0.00	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:45  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07355

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07360	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.0995	0.0995	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07360	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.205	0.209	0.211	0.170 to 0.230	102	70.0 to 130	1.93	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07360	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	13.7	13.6	5.36	4.25 to 5.75	106	70.0 to 130	0.733	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07360	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.187	0.182	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.71	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07360	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0960	0.0965	0.0949	0.0850 to 0.115	95.7	70.0 to 130	0.519	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07360	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	10.2	10.1	10.2	8.50 to 11.5	99.6	70.0 to 130	0.985	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07360	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07360	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	4.47	4.47	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07360	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	9.67	9.89	5.39	4.25 to 5.75	102	70.0 to 130	2.25	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07360	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.102	0.100	0.0996	0.0850 to 0.115	102	70.0 to 130	1.98	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:45  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07355

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115	110	70.0 to 130	1.80	20.0		
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6		103	80.0 to 120	0.00	20.0		

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 15:45  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07355

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07355	Alkalinity, Total as CaCO3	mg/L					143	50.8	45.0 to 55.0			3.44	10.0
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07356

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 11:59		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	4/22/22 14:24	4/25/22 13:47		10.15	107	mg/L	0.70035	4.06		
* Iron, Total	4/22/22 14:24	4/25/22 11:59		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	4/22/22 14:24	4/25/22 11:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 11:59		1.015	1.81	mg/L	0.021315	0.406		
Silica, Total (calc.)	4/22/22 14:24	4/25/22 11:59		1	9.07	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 11:59		1.015	4.24	mg/L	0.02030	0.25375		
* Sodium, Total	4/22/22 14:24	4/25/22 11:59		1.015	2.03	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	4/26/22 10:33	4/27/22 10:22		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	4/26/22 10:33	4/27/22 12:13		10.15	95.7	mg/L	0.70035	4.06		
* Iron, Dissolved	4/26/22 10:33	4/27/22 10:22		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	4/26/22 10:33	4/27/22 10:22		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 10:22		1.015	1.80	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 10:22		1	9.14	mg/L				
Silicon, Dissolved	4/26/22 10:33	4/27/22 10:22		1.015	4.27	mg/L	0.02030	0.25375		
* Sodium, Dissolved	4/26/22 10:33	4/27/22 10:22		1.015	2.04	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	4/18/22 10:35	4/19/22 18:12		1.015	0.0403	mg/L	0.000102	0.000203		
* Beryllium, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 18:12		1.015	0.00712	mg/L	0.000152	0.000203		
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.169505	0.5075	U	

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07356

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 18:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	0.000136	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	0.0330	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	0.0000685	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	0.00714	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	0.177	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:54		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:43	4/19/22 14:43		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/27/22 08:10	4/27/22 09:02		1	263	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	273	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/27/22 08:10	4/27/22 09:02		1	262	mg/L			
Carbonate Alkalinity, (calc.)	4/27/22 08:10	4/27/22 09:02		1	0.874	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 20:43	4/25/22 20:43		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07356

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:18	4/15/22 10:18		1	2.77	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:22	4/15/22 15:22		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:09	4/19/22 12:09		1	1.68	mg/L	0.6	2	J
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/13/22 10:01	4/13/22 10:01			449.82	uS/cm			FA
pH	4/13/22 10:01	4/13/22 10:01			6.85	SU			FA
Temperature	4/13/22 10:01	4/13/22 10:01			30.23	C			FA
Turbidity	4/13/22 10:01	4/13/22 10:01			0.72	NTU			FA
Sulfide	4/13/22 10:01	4/13/22 10:01			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07356

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC07360	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0994	0.0976	0.102	0.0850 to 0.115	99.4	70.0 to 130	1.83	20.0
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07360	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0948	0.0962	0.0867	0.0850 to 0.115	94.8	70.0 to 130	1.47	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07360	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0979	0.0963	0.102	0.0850 to 0.115	97.7	70.0 to 130	1.65	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07360	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.112	0.112	0.0908	0.0850 to 0.115	89.3	70.0 to 130	0.00	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07360	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0877	0.0882	0.0914	0.0850 to 0.115	87.7	70.0 to 130	0.569	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07360	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07360	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0986	0.0991	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.506	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07360	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	84.5	90.8	4.85	4.25 to 5.75	52.0	70.0 to 130	7.19	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07360	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0973	0.0957	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.66	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07360	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0998	0.0987	0.0982	0.0850 to 0.115	99.6	70.0 to 130	1.11	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07360	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.202	0.202	0.207	0.170 to 0.230	101	70.0 to 130	0.00	20.0

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



# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07356

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07360	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.0995	0.0995	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07360	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.205	0.209	0.211	0.170 to 0.230	102	70.0 to 130	1.93	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07360	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	13.7	13.6	5.36	4.25 to 5.75	106	70.0 to 130	0.733	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07360	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.187	0.182	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.71	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07360	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0960	0.0965	0.0949	0.0850 to 0.115	95.7	70.0 to 130	0.519	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07360	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	10.2	10.1	10.2	8.50 to 11.5	99.6	70.0 to 130	0.985	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07360	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07360	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	4.47	4.47	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07360	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	9.67	9.89	5.39	4.25 to 5.75	102	70.0 to 130	2.25	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07360	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.102	0.100	0.0996	0.0850 to 0.115	102	70.0 to 130	1.98	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07356

Sample	Analysis	Units	MB	MB				Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike	MS	MSD			Rec	Limit		
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6		103	80.0 to 120	0.00	20.0

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07356

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07360	Alkalinity, Total as CaCO3	mg/L					241	50.9	45.0 to 55.0			7.76	10.0
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07357

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 14:24	4/25/22 12:02		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 14:24	4/25/22 13:50		10.15	104	mg/L	0.70035	4.06	
* Iron, Total	4/22/22 14:24	4/25/22 12:02		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	4/22/22 14:24	4/25/22 12:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	4/22/22 14:24	4/25/22 12:02		1.015	1.79	mg/L	0.021315	0.406	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 12:02		1	9.05	mg/L			
Silicon, Total	4/22/22 14:24	4/25/22 12:02		1.015	4.23	mg/L	0.02030	0.25375	
* Sodium, Total	4/22/22 14:24	4/25/22 12:02		1.015	2.03	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	4/26/22 10:33	4/27/22 10:25		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	4/26/22 10:33	4/27/22 12:16		10.15	95.5	mg/L	0.70035	4.06	
* Iron, Dissolved	4/26/22 10:33	4/27/22 10:25		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	4/26/22 10:33	4/27/22 10:25		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 10:25		1.015	1.81	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 10:25		1	9.24	mg/L			
Silicon, Dissolved	4/26/22 10:33	4/27/22 10:25		1.015	4.32	mg/L	0.02030	0.25375	
* Sodium, Dissolved	4/26/22 10:33	4/27/22 10:25		1.015	2.03	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	4/18/22 10:35	4/19/22 18:16		1.015	0.0404	mg/L	0.000102	0.000203	
* Beryllium, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	4/18/22 10:35	4/19/22 18:16		1.015	0.00652	mg/L	0.000152	0.000203	
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.169505	0.5075	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07357

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 18:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	0.000112	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	0.0330	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	0.0000689	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	0.00692	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:56		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:44	4/19/22 14:44		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/27/22 08:10	4/27/22 09:02		1	251	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	270	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/27/22 08:10	4/27/22 09:02		1	248	mg/L			
Carbonate Alkalinity, (calc.)	4/27/22 08:10	4/27/22 09:02		1	2.50	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 21:01	4/25/22 21:01		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 10:05  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07357

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:19	4/15/22 10:19		1	2.78	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:23	4/15/22 15:23		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:10	4/19/22 12:10		1	1.66	mg/L	0.6	2	J
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/13/22 10:01	4/13/22 10:01			449.82	uS/cm			FA
pH	4/13/22 10:01	4/13/22 10:01			6.85	SU			FA
Temperature	4/13/22 10:01	4/13/22 10:01			30.23	C			FA
Turbidity	4/13/22 10:01	4/13/22 10:01			0.72	NTU			FA
Sulfide	4/13/22 10:01	4/13/22 10:01			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07357

Sample	Analysis	Units	MB	MB				Standard		Rec			Prec Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	
BC07360	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0994	0.0976	0.102	0.0850 to 0.115	99.4	70.0 to 130	1.83	20.0
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07360	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0948	0.0962	0.0867	0.0850 to 0.115	94.8	70.0 to 130	1.47	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07360	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0979	0.0963	0.102	0.0850 to 0.115	97.7	70.0 to 130	1.65	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07360	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.112	0.112	0.0908	0.0850 to 0.115	89.3	70.0 to 130	0.00	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07360	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0877	0.0882	0.0914	0.0850 to 0.115	87.7	70.0 to 130	0.569	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07360	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07360	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0986	0.0991	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.506	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07360	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	84.5	90.8	4.85	4.25 to 5.75	52.0	70.0 to 130	7.19	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07360	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0973	0.0957	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.66	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07360	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0998	0.0987	0.0982	0.0850 to 0.115	99.6	70.0 to 130	1.11	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07360	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.202	0.202	0.207	0.170 to 0.230	101	70.0 to 130	0.00	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07357

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07360	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.0995	0.0995	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07360	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.205	0.209	0.211	0.170 to 0.230	102	70.0 to 130	1.93	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07360	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	13.7	13.6	5.36	4.25 to 5.75	106	70.0 to 130	0.733	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07360	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.187	0.182	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.71	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07360	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0960	0.0965	0.0949	0.0850 to 0.115	95.7	70.0 to 130	0.519	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07360	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	10.2	10.1	10.2	8.50 to 11.5	99.6	70.0 to 130	0.985	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07360	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07360	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	4.47	4.47	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07360	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	9.67	9.89	5.39	4.25 to 5.75	102	70.0 to 130	2.25	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07360	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.102	0.100	0.0996	0.0850 to 0.115	102	70.0 to 130	1.98	20.0

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



# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07357

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6		103	80.0 to 120	0.00	20.0

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 10:05  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07357

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07360	Alkalinity, Total as CaCO3	mg/L					241	50.9	45.0 to 55.0			7.76	10.0
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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

# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-1

**Location Code:** WMWGASGFB  
**Collected:** 4/13/22 10:40  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07358

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 12:05		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	4/22/22 14:24	4/25/22 12:05		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	4/22/22 14:24	4/25/22 12:05		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	4/22/22 14:24	4/25/22 12:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 12:05		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 12:05		1	Not Detected	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 12:05		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	4/22/22 14:24	4/25/22 12:05		1.015	Not Detected	mg/L	0.03045	0.406	U	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Beryllium, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000152	0.000203	U	
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	4/18/22 10:35	4/19/22 18:19		1.015	Not Detected	mg/L	0.000068	0.000203	U	
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>								
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 14:59		1	Not Detected	mg/L	0.0003	0.0005	U	
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>								
* Nitrogen, Nitrate/Nitrite	4/19/22 14:45	4/19/22 14:45		1	Not Detected	mg/L as N	0.20	0.3	U	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>								
* Solids, Dissolved	4/14/22 14:13	4/18/22 13:18		1	Not Detected	mg/L		25	U	

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

**Comments:**

# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-1

**Location Code:** WMWGASGFB

**Collected:** 4/13/22 10:40

**Customer ID:**

**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07358

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 21:18	4/25/22 21:18		1	Not Detected	mg/L	1.00	2	U
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:20	4/15/22 10:20		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:24	4/15/22 15:24		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:12	4/19/22 12:12		1	Not Detected	mg/L	0.6	2	U

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

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**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGFB  
**Sample Date:** 4/13/22 10:40  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Field Blank-1

**Laboratory ID Number:** BC07358

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 4/13/22 10:40

**Customer ID:**

**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Field Blank-1

**Laboratory ID Number:** BC07358

Sample	Analysis	Units	MB	MB				Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike	MS	MSD			Rec	Limit		
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6		103	80.0 to 120	0.00	20.0

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 4/13/22 10:40

**Customer ID:**

**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Field Blank-1

**Laboratory ID Number:** BC07358

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07357	Solids, Dissolved	mg/L	0.0000	25.0			270	48.0	40.0 to 60.0			0.00	10.0

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**Comments:**

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 11:33  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07359

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 12:08		1.015	0.0565	mg/L	0.030000	0.1015	J	
* Calcium, Total	4/22/22 14:24	4/25/22 12:08		1.015	15.0	mg/L	0.070035	0.406		
* Iron, Total	4/22/22 14:24	4/25/22 12:08		1.015	0.0323	mg/L	0.008120	0.0406	J	
* Lithium, Total	4/22/22 14:24	4/25/22 12:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 12:08		1.015	2.76	mg/L	0.021315	0.406		
Silica, Total (calc.)	4/22/22 14:24	4/25/22 12:08		1	7.34	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 12:08		1.015	3.43	mg/L	0.02030	0.25375		
* Sodium, Total	4/22/22 14:24	4/25/22 12:08		1.015	5.34	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	4/26/22 10:33	4/27/22 10:28		1.015	0.0571	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	4/26/22 10:33	4/27/22 10:28		1.015	15.1	mg/L	0.070035	0.406		
* Iron, Dissolved	4/26/22 10:33	4/27/22 10:28		1.015	0.0314	mg/L	0.008120	0.0406	J	
* Lithium, Dissolved	4/26/22 10:33	4/27/22 10:28		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 10:28		1.015	2.78	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 10:28		1	7.38	mg/L				
Silicon, Dissolved	4/26/22 10:33	4/27/22 10:28		1.015	3.45	mg/L	0.02030	0.25375		
* Sodium, Dissolved	4/26/22 10:33	4/27/22 10:28		1.015	5.47	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 18:23		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 18:23		1.015	0.0101	mg/L	0.006090	0.01015	J	
* Arsenic, Total	4/18/22 10:35	4/19/22 18:23		1.015	0.0000877	mg/L	0.000081	0.000203	J	
* Barium, Total	4/18/22 10:35	4/19/22 18:23		1.015	0.0162	mg/L	0.000102	0.000203		
* Beryllium, Total	4/18/22 10:35	4/19/22 18:23		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 18:23		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 18:23		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	4/18/22 10:35	4/19/22 18:23		1.015	0.00324	mg/L	0.000068	0.000203		
* Lead, Total	4/18/22 10:35	4/19/22 18:23		1.015	0.000106	mg/L	0.000068	0.000203	J	
* Manganese, Total	4/18/22 10:35	4/19/22 18:23		1.015	0.239	mg/L	0.000152	0.000203		
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:23		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	4/18/22 10:35	4/19/22 18:23		1.015	0.256	mg/L	0.169505	0.5075	J	

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

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



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 11:33  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07359

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 18:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 18:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	0.000168	mg/L	0.000081	0.000203	J
* Barium, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	0.0125	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	0.00333	mg/L	0.000068	0.000203	
* Lead, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	0.000110	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	0.228	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	0.278	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 15:01		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:46	4/19/22 14:46		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/27/22 08:10	4/27/22 09:02		1	33.6	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/18/22 10:48	4/19/22 13:20		1	84.0	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/27/22 08:10	4/27/22 09:02		1	33.6	mg/L			
Carbonate Alkalinity, (calc.)	4/27/22 08:10	4/27/22 09:02		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 21:35	4/25/22 21:35		1	Not Detected	mg/L	1.00	2	U

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 11:33  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07359

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:21	4/15/22 10:21		1	19.6	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:25	4/15/22 15:25		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:13	4/19/22 12:13		1	2.73	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/13/22 11:29	4/13/22 11:29			140.99	uS/cm			FA
pH	4/13/22 11:29	4/13/22 11:29			5.29	SU			FA
Temperature	4/13/22 11:29	4/13/22 11:29			29.00	C			FA
Turbidity	4/13/22 11:29	4/13/22 11:29			0.57	NTU			FA
Sulfide	4/13/22 11:29	4/13/22 11:29			0	mg/L			FA

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

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 11:33  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07359

Sample	Analysis	Units	MB	MB				Standard		Rec			Prec
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	
BC07360	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0994	0.0976	0.102	0.0850 to 0.115	99.4	70.0 to 130	1.83	20.0
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07360	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0948	0.0962	0.0867	0.0850 to 0.115	94.8	70.0 to 130	1.47	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07360	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0979	0.0963	0.102	0.0850 to 0.115	97.7	70.0 to 130	1.65	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07360	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.112	0.112	0.0908	0.0850 to 0.115	89.3	70.0 to 130	0.00	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07360	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0877	0.0882	0.0914	0.0850 to 0.115	87.7	70.0 to 130	0.569	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07360	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07360	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0986	0.0991	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.506	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07360	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	84.5	90.8	4.85	4.25 to 5.75	52.0	70.0 to 130	7.19	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07360	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0973	0.0957	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.66	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07360	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0998	0.0987	0.0982	0.0850 to 0.115	99.6	70.0 to 130	1.11	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07360	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.202	0.202	0.207	0.170 to 0.230	101	70.0 to 130	0.00	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 11:33  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07359

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07360	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.0995	0.0995	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07360	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.205	0.209	0.211	0.170 to 0.230	102	70.0 to 130	1.93	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07360	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	13.7	13.6	5.36	4.25 to 5.75	106	70.0 to 130	0.733	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07360	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.187	0.182	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.71	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07360	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0960	0.0965	0.0949	0.0850 to 0.115	95.7	70.0 to 130	0.519	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07360	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	10.2	10.1	10.2	8.50 to 11.5	99.6	70.0 to 130	0.985	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07360	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07360	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	4.47	4.47	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07360	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	9.67	9.89	5.39	4.25 to 5.75	102	70.0 to 130	2.25	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07360	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.102	0.100	0.0996	0.0850 to 0.115	102	70.0 to 130	1.98	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 11:33  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07359

Sample	Analysis	Units	MB	MB				Standard	Standard		Rec		Prec	Limit	
				Limit	Spike	MS	MSD		Limit	Rec	Limit	Prec			
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115		110	70.0 to 130		1.80	20.0
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6			103	80.0 to 120		0.00	20.0

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 11:33  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07359

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07360	Alkalinity, Total as CaCO3	mg/L					241	50.9	45.0 to 55.0			7.76	10.0
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07360	Solids, Dissolved	mg/L	0.0000	25.0			241	49.0	40.0 to 60.0			3.67	10.0

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 12:25  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07360

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 12:10		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	4/22/22 14:24	4/25/22 13:54		10.15	88.0	mg/L	0.70035	4.06		
* Iron, Total	4/22/22 14:24	4/25/22 12:10		1.015	0.0122	mg/L	0.008120	0.0406	J	
* Lithium, Total	4/22/22 14:24	4/25/22 12:10		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 12:10		1.015	8.30	mg/L	0.021315	0.406		
Silica, Total (calc.)	4/22/22 14:24	4/25/22 12:10		1	7.30	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 12:10		1.015	3.41	mg/L	0.02030	0.25375		
* Sodium, Total	4/22/22 14:24	4/25/22 12:10		1.015	4.40	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	4/26/22 10:33	4/27/22 10:31		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	4/26/22 10:33	4/27/22 12:20		10.15	81.9	mg/L	0.70035	4.06	RA	
* Iron, Dissolved	4/26/22 10:33	4/27/22 10:31		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	4/26/22 10:33	4/27/22 10:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	4/26/22 10:33	4/27/22 10:31		1.015	8.42	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	4/26/22 10:33	4/27/22 10:31		1	7.30	mg/L				
Silicon, Dissolved	4/26/22 10:33	4/27/22 10:31		1.015	3.41	mg/L	0.02030	0.25375		
* Sodium, Dissolved	4/26/22 10:33	4/27/22 10:31		1.015	4.55	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 18:27		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 18:27		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	4/18/22 10:35	4/19/22 18:27		1.015	0.000210	mg/L	0.000081	0.000203		
* Barium, Total	4/18/22 10:35	4/19/22 18:27		1.015	0.0272	mg/L	0.000102	0.000203		
* Beryllium, Total	4/18/22 10:35	4/19/22 18:27		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 18:27		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 18:27		1.015	0.000210	mg/L	0.000203	0.001015	J	
* Cobalt, Total	4/18/22 10:35	4/19/22 18:27		1.015	0.000155	mg/L	0.000068	0.000203	J	
* Lead, Total	4/18/22 10:35	4/19/22 18:27		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 18:27		1.015	0.0996	mg/L	0.000152	0.000203		
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:27		1.015	0.000310	mg/L	0.000102	0.000203		
* Potassium, Total	4/18/22 10:35	4/19/22 18:27		1.015	0.244	mg/L	0.169505	0.5075	J	

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

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

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 12:25  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07360

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	4/18/22 10:35	4/19/22 18:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	4/18/22 10:35	4/19/22 18:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	0.000213	mg/L	0.000081	0.000203	
* Barium, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	0.0227	mg/L	0.000102	0.000203	
* Beryllium, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	0.000627	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	0.000201	mg/L	0.000068	0.000203	J
* Lead, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	0.0876	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	0.000275	mg/L	0.000102	0.000203	
* Potassium, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	0.239	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	4/18/22 10:40	4/19/22 14:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>							
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 15:03		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	4/19/22 14:47	4/19/22 14:47		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity, Total as CaCO3	4/27/22 08:10	4/27/22 09:02		1	223	mg/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/18/22 10:48	4/19/22 13:20		1	250	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	4/27/22 08:10	4/27/22 09:02		1	222	mg/L			
Carbonate Alkalinity, (calc.)	4/27/22 08:10	4/27/22 09:02		1	0.603	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 21:56	4/25/22 21:56		1	Not Detected	mg/L	1.00	2	U

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

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



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 4/13/22 12:25  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07360

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:23	4/15/22 10:23		1	3.76	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:27	4/15/22 15:27		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:14	4/19/22 12:14		1	8.25	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	4/13/22 12:20	4/13/22 12:20			415.59	uS/cm			FA
pH	4/13/22 12:20	4/13/22 12:20			6.74	SU			FA
Temperature	4/13/22 12:20	4/13/22 12:20			28.15	C			FA
Turbidity	4/13/22 12:20	4/13/22 12:20			0.71	NTU			FA
Sulfide	4/13/22 12:20	4/13/22 12:20			0	mg/L			FA

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

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

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-1	Conductivity	4/13/2022 9:37	381	uS/cm
GN-GSA-MW-1	DO	4/13/2022 9:37	0.32	mg/L
GN-GSA-MW-1	Depth to Water Detail	4/13/2022 9:37	27.93	ft
GN-GSA-MW-1	Oxidation Reduction Potention	4/13/2022 9:37	-0.48	mv
GN-GSA-MW-1	pH	4/13/2022 9:37	7.48	SU
GN-GSA-MW-1	Temperature	4/13/2022 9:37	19.99	C
GN-GSA-MW-1	Turbidity	4/13/2022 9:37	0.7	NTU
GN-GSA-MW-1	Conductivity	4/13/2022 9:42	379.21	uS/cm
GN-GSA-MW-1	DO	4/13/2022 9:42	0.24	mg/L
GN-GSA-MW-1	Depth to Water Detail	4/13/2022 9:42	28.26	ft
GN-GSA-MW-1	Oxidation Reduction Potention	4/13/2022 9:42	-21.89	mv
GN-GSA-MW-1	pH	4/13/2022 9:42	7.49	SU
GN-GSA-MW-1	Temperature	4/13/2022 9:42	19.99	C
GN-GSA-MW-1	Turbidity	4/13/2022 9:42	0.75	NTU
GN-GSA-MW-1	Conductivity	4/13/2022 9:47	379.86	uS/cm
GN-GSA-MW-1	DO	4/13/2022 9:47	0.05	mg/L
GN-GSA-MW-1	Depth to Water Detail	4/13/2022 9:47	28.44	ft
GN-GSA-MW-1	Oxidation Reduction Potention	4/13/2022 9:47	-38.57	mv
GN-GSA-MW-1	pH	4/13/2022 9:47	7.5	SU
GN-GSA-MW-1	Temperature	4/13/2022 9:47	20.11	C
GN-GSA-MW-1	Turbidity	4/13/2022 9:47	0.72	NTU
GN-GSA-MW-1	Conductivity	4/13/2022 9:52	380.36	uS/cm
GN-GSA-MW-1	DO	4/13/2022 9:52	0.11	mg/L
GN-GSA-MW-1	Depth to Water Detail	4/13/2022 9:52	28.63	ft
GN-GSA-MW-1	Oxidation Reduction Potention	4/13/2022 9:52	-49.93	mv
GN-GSA-MW-1	pH	4/13/2022 9:52	7.49	SU
GN-GSA-MW-1	Temperature	4/13/2022 9:52	20.14	C
GN-GSA-MW-1	Turbidity	4/13/2022 9:52	0.76	NTU
GN-GSA-MW-1	Conductivity	4/13/2022 9:57	379.96	uS/cm
GN-GSA-MW-1	DO	4/13/2022 9:57	0.15	mg/L
GN-GSA-MW-1	Depth to Water Detail	4/13/2022 9:57	28.72	ft
GN-GSA-MW-1	Oxidation Reduction Potention	4/13/2022 9:57	-58.89	mv
GN-GSA-MW-1	pH	4/13/2022 9:57	7.5	SU
GN-GSA-MW-1	Sulfide	4/13/2022 9:57	0	mg/L
GN-GSA-MW-1	Temperature	4/13/2022 9:57	20.05	C
GN-GSA-MW-1	Turbidity	4/13/2022 9:57	1.56	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-2	Conductivity	4/12/2022 10:42	513.29	uS/cm
GN-GSA-MW-2	DO	4/12/2022 10:42	2.11	mg/L
GN-GSA-MW-2	Depth to Water Detail	4/12/2022 10:42	13.81	ft
GN-GSA-MW-2	Oxidation Reduction Potention	4/12/2022 10:42	31.02	mv
GN-GSA-MW-2	pH	4/12/2022 10:42	6.4	SU
GN-GSA-MW-2	Temperature	4/12/2022 10:42	21.81	C
GN-GSA-MW-2	Turbidity	4/12/2022 10:42	2.55	NTU
GN-GSA-MW-2	Conductivity	4/12/2022 10:47	496.83	uS/cm
GN-GSA-MW-2	DO	4/12/2022 10:47	2.35	mg/L
GN-GSA-MW-2	Depth to Water Detail	4/12/2022 10:47	14.22	ft
GN-GSA-MW-2	Oxidation Reduction Potention	4/12/2022 10:47	25.17	mv
GN-GSA-MW-2	pH	4/12/2022 10:47	6.39	SU
GN-GSA-MW-2	Temperature	4/12/2022 10:47	21.53	C
GN-GSA-MW-2	Turbidity	4/12/2022 10:47	2.05	NTU
GN-GSA-MW-2	Conductivity	4/12/2022 10:52	483.32	uS/cm
GN-GSA-MW-2	DO	4/12/2022 10:52	2.88	mg/L
GN-GSA-MW-2	Depth to Water Detail	4/12/2022 10:52	14.32	ft
GN-GSA-MW-2	Oxidation Reduction Potention	4/12/2022 10:52	24.59	mv
GN-GSA-MW-2	pH	4/12/2022 10:52	6.42	SU
GN-GSA-MW-2	Temperature	4/12/2022 10:52	21.42	C
GN-GSA-MW-2	Turbidity	4/12/2022 10:52	1.96	NTU
GN-GSA-MW-2	Conductivity	4/12/2022 10:57	478.16	uS/cm
GN-GSA-MW-2	DO	4/12/2022 10:57	3.08	mg/L
GN-GSA-MW-2	Depth to Water Detail	4/12/2022 10:57	14.45	ft
GN-GSA-MW-2	Oxidation Reduction Potention	4/12/2022 10:57	26.93	mv
GN-GSA-MW-2	pH	4/12/2022 10:57	6.44	SU
GN-GSA-MW-2	Temperature	4/12/2022 10:57	21.66	C
GN-GSA-MW-2	Turbidity	4/12/2022 10:57	1.87	NTU
GN-GSA-MW-2	Conductivity	4/12/2022 11:02	477.36	uS/cm
GN-GSA-MW-2	DO	4/12/2022 11:02	3.1	mg/L
GN-GSA-MW-2	Depth to Water Detail	4/12/2022 11:02	14.53	ft
GN-GSA-MW-2	Oxidation Reduction Potention	4/12/2022 11:02	29.81	mv
GN-GSA-MW-2	pH	4/12/2022 11:02	6.48	SU
GN-GSA-MW-2	Sulfide	4/12/2022 11:02	0	mg/L
GN-GSA-MW-2	Temperature	4/12/2022 11:02	21.7	C
GN-GSA-MW-2	Turbidity	4/12/2022 11:02	1.99	NTU

**Alabama Power Company  
Plant Gaston Gypsum Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GN-GSA-MW-3	Conductivity	4/12/2022 14:58	207.77	uS/cm
GN-GSA-MW-3	DO	4/12/2022 14:58	1.39	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 14:58	13.41	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 14:58	150.8	mv
GN-GSA-MW-3	pH	4/12/2022 14:58	5.16	SU
GN-GSA-MW-3	Temperature	4/12/2022 14:58	20.38	C
GN-GSA-MW-3	Turbidity	4/12/2022 14:58	1.62	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:03	193.94	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:03	1.53	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:03	15	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:03	150	mv
GN-GSA-MW-3	pH	4/12/2022 15:03	5.15	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:03	20.23	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:03	1.56	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:08	195.56	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:08	1.63	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:08	15.68	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:08	148.83	mv
GN-GSA-MW-3	pH	4/12/2022 15:08	5.19	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:08	20.45	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:08	1.25	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:13	201.53	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:13	1.69	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:13	16.22	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:13	146.86	mv
GN-GSA-MW-3	pH	4/12/2022 15:13	5.25	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:13	20.84	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:13	1.11	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:18	212.37	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:18	1.69	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:18	16.56	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:18	145.3	mv
GN-GSA-MW-3	pH	4/12/2022 15:18	5.31	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:18	20.86	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:18	1.04	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:23	220.74	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:23	1.72	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:23	16.8	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:23	143.24	mv
GN-GSA-MW-3	pH	4/12/2022 15:23	5.36	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:23	20.88	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:23	1.22	NTU
GN-GSA-MW-3	Conductivity	4/12/2022 15:28	228.72	uS/cm
GN-GSA-MW-3	DO	4/12/2022 15:28	1.73	mg/L
GN-GSA-MW-3	Depth to Water Detail	4/12/2022 15:28	17.08	ft
GN-GSA-MW-3	Oxidation Reduction Potention	4/12/2022 15:28	140.21	mv
GN-GSA-MW-3	pH	4/12/2022 15:28	5.4	SU
GN-GSA-MW-3	Temperature	4/12/2022 15:28	20.77	C
GN-GSA-MW-3	Turbidity	4/12/2022 15:28	1.4	NTU

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 12:25  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07360

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC07360	Aluminum, Dissolved	mg/L	0.000593	0.010	0.100	0.0994	0.0976	0.102	0.0850 to 0.115	99.4	70.0 to 130	1.83	20.0
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07360	Antimony, Dissolved	mg/L	0.000184	0.00100	0.100	0.0948	0.0962	0.0867	0.0850 to 0.115	94.8	70.0 to 130	1.47	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07360	Arsenic, Dissolved	mg/L	0.0000278	0.000176	0.100	0.0979	0.0963	0.102	0.0850 to 0.115	97.7	70.0 to 130	1.65	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07360	Barium, Dissolved	mg/L	-0.0000005	0.00100	0.100	0.112	0.112	0.0908	0.0850 to 0.115	89.3	70.0 to 130	0.00	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07360	Beryllium, Dissolved	mg/L	0.0000897	0.000880	0.100	0.0877	0.0882	0.0914	0.0850 to 0.115	87.7	70.0 to 130	0.569	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07360	Boron, Dissolved	mg/L	0.0000005	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07360	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0986	0.0991	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.506	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07360	Calcium, Dissolved	mg/L	-0.00159	0.152	5.00	84.5	90.8	4.85	4.25 to 5.75	52.0	70.0 to 130	7.19	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07360	Chromium, Dissolved	mg/L	-0.0000240	0.000440	0.100	0.0973	0.0957	0.0979	0.0850 to 0.115	96.7	70.0 to 130	1.66	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07360	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0998	0.0987	0.0982	0.0850 to 0.115	99.6	70.0 to 130	1.11	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07360	Iron, Dissolved	mg/L	0.000084	0.0176	0.2	0.202	0.202	0.207	0.170 to 0.230	101	70.0 to 130	0.00	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 12:25  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07360

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07360	Lead, Dissolved	mg/L	0.0000177	0.000147	0.100	0.0995	0.0995	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.00	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07360	Lithium, Dissolved	mg/L	-0.000113	0.0154	0.200	0.205	0.209	0.211	0.170 to 0.230	102	70.0 to 130	1.93	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07360	Magnesium, Dissolved	mg/L	-0.000969	0.0462	5.00	13.7	13.6	5.36	4.25 to 5.75	106	70.0 to 130	0.733	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07360	Manganese, Dissolved	mg/L	-0.0000191	0.0002	0.100	0.187	0.182	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.71	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07360	Molybdenum, Dissolved	mg/L	0.0000130	0.0002	0.100	0.0960	0.0965	0.0949	0.0850 to 0.115	95.7	70.0 to 130	0.519	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07360	Potassium, Dissolved	mg/L	-0.000327	0.367	10.0	10.2	10.1	10.2	8.50 to 11.5	99.6	70.0 to 130	0.985	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07360	Selenium, Dissolved	mg/L	0.0000335	0.00100	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07360	Silicon, Dissolved	mg/L	-0.000426	0.0440	1.00	4.47	4.47	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07360	Sodium, Dissolved	mg/L	0.000333	0.0660	5.00	9.67	9.89	5.39	4.25 to 5.75	102	70.0 to 130	2.25	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07360	Thallium, Dissolved	mg/L	0.0000153	0.000147	0.100	0.102	0.100	0.0996	0.0850 to 0.115	102	70.0 to 130	1.98	20.0

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

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 12:25  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07360

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115	110	70.0 to 130	1.80	20.0		
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6		103	80.0 to 120	0.00	20.0		

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

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/13/22 12:25  
**Customer ID:**  
**Delivery Date:** 4/14/22 11:53

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

**Laboratory ID Number:** BC07360

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
BC07360	Alkalinity, Total as CaCO3	mg/L					241	50.9	45.0 to 55.0			7.76	10.0
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07360	Solids, Dissolved	mg/L	0.0000	25.0			241	49.0	40.0 to 60.0			3.67	10.0

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



# Certificate Of Analysis

**Description:** Gaston Gypsum Equipment Blank-1

**Location Code:** WMWGASGEB  
**Collected:** 4/13/22 12:40  
**Customer ID:**  
**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07361

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 14:24	4/25/22 12:13		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	4/22/22 14:24	4/25/22 12:13		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	4/22/22 14:24	4/25/22 12:13		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	4/22/22 14:24	4/25/22 12:13		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	4/22/22 14:24	4/25/22 12:13		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	4/22/22 14:24	4/25/22 12:13		1	Not Detected	mg/L				
Silicon, Total	4/22/22 14:24	4/25/22 12:13		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	4/22/22 14:24	4/25/22 12:13		1.015	Not Detected	mg/L	0.03045	0.406	U	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Beryllium, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000152	0.000203	U	
* Molybdenum, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	4/18/22 10:35	4/19/22 18:30		1.015	Not Detected	mg/L	0.000068	0.000203	U	
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ABB</b>								
* Mercury, Total by CVAA	4/22/22 11:23	4/22/22 15:06		1	Not Detected	mg/L	0.0003	0.0005	U	
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>								
* Nitrogen, Nitrate/Nitrite	4/19/22 14:48	4/19/22 14:48		1	Not Detected	mg/L as N	0.20	0.3	U	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>								
* Solids, Dissolved	4/18/22 10:48	4/19/22 13:20		1	Not Detected	mg/L		25	U	

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

**Comments:**

# Certificate Of Analysis

**Description:** Gaston Gypsum Equipment Blank-1

**Location Code:** WMWGASGEB

**Collected:** 4/13/22 12:40

**Customer ID:**

**Submittal Date:** 4/14/22 11:53

**Laboratory ID Number:** BC07361

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	4/25/22 22:16	4/25/22 22:16		1	Not Detected	mg/L	1.00	2	U
<b>Analytical Method: SM4500CI E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 10:24	4/15/22 10:24		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 15:28	4/15/22 15:28		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 12:15	4/19/22 12:15		1	Not Detected	mg/L	0.6	2	U

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

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**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGEB

**Sample Date:** 4/13/22 12:40

**Customer ID:**

**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Equipment Blank-1

**Laboratory ID Number:** BC07361

Sample	Analysis	Units	MB	MB				Standard		Rec			Prec Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	
BC07361	Aluminum, Total	mg/L	0.000653	0.010	0.100	0.106	0.109	0.114	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC07361	Antimony, Total	mg/L	0.000310	0.00100	0.100	0.104	0.108	0.104	0.0850 to 0.115	104	70.0 to 130	3.77	20.0
BC07361	Arsenic, Total	mg/L	0.0000077	0.000176	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BC07361	Barium, Total	mg/L	-0.0000092	0.00100	0.100	0.112	0.114	0.110	0.0850 to 0.115	112	70.0 to 130	1.77	20.0
BC07361	Beryllium, Total	mg/L	0.0000051	0.000880	0.100	0.106	0.105	0.109	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC07361	Boron, Total	mg/L	-0.000208	0.0650	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC07361	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.107	0.106	0.111	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC07361	Calcium, Total	mg/L	0.00105	0.152	5.00	4.84	4.83	4.89	4.25 to 5.75	96.8	70.0 to 130	0.207	20.0
BC07361	Chloride	mg/L	0.0101	1.00	10.0	9.92	9.84	9.85	9.00 to 11.0	99.2	80.0 to 120	0.810	20.0
BC07361	Chromium, Total	mg/L	-0.0000857	0.000440	0.100	0.0964	0.0975	0.101	0.0850 to 0.115	96.4	70.0 to 130	1.13	20.0
BC07361	Cobalt, Total	mg/L	-0.0000744	0.000147	0.100	0.101	0.103	0.107	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC07361	Fluoride	mg/L	-0.00923	0.125	2.50	2.61	2.50	2.60	2.25 to 2.75	104	80.0 to 120	4.31	20.0
BC07361	Iron, Total	mg/L	0.000618	0.0176	0.2	0.197	0.196	0.198	0.170 to 0.230	98.5	70.0 to 130	0.509	20.0
BC07361	Lead, Total	mg/L	0.0000051	0.000147	0.100	0.115	0.116	0.114	0.0850 to 0.115	115	70.0 to 130	0.866	20.0
BC07361	Lithium, Total	mg/L	0.000204	0.0154	0.200	0.202	0.198	0.202	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BC07361	Magnesium, Total	mg/L	0.00546	0.0462	5.00	5.18	5.11	5.18	4.25 to 5.75	104	70.0 to 130	1.36	20.0
BC07361	Manganese, Total	mg/L	-0.0000103	0.0002	0.100	0.103	0.105	0.109	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC07361	Mercury, Total by CVAA	mg/L	0.000110	0.000500	0.004	0.00375	0.00370	0.00387	0.00340 to 0.00460	93.8	70.0 to 130	1.34	20.0
BC07361	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC07361	Potassium, Total	mg/L	-0.00861	0.367	10.0	9.55	9.72	10.1	8.50 to 11.5	95.5	70.0 to 130	1.76	20.0
BC07361	Selenium, Total	mg/L	0.0000746	0.00100	0.100	0.104	0.105	0.108	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC07361	Silicon, Total	mg/L	0.000115	0.0440	1.00	0.999	0.992	1.01	0.850 to 1.15	99.9	70.0 to 130	0.703	20.0
BC07361	Sodium, Total	mg/L	0.00015	0.0660	5.00	5.08	4.99	5.16	4.25 to 5.75	102	70.0 to 130	1.79	20.0

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGEB

**Sample Date:** 4/13/22 12:40

**Customer ID:**

**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Equipment Blank-1

**Laboratory ID Number:** BC07361

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard Limit	Rec		Prec Limit
				Limit	Spike	MS	MSD				Rec	Limit	
BC07361	Sulfate	mg/L	0.157	2.0	20.0	20.4	20.3	19.9	18.0 to 22.0	102	80.0 to 120	0.491	20.0
BC07361	Thallium, Total	mg/L	-0.0000834	0.000147	0.100	0.110	0.112	0.111	0.0850 to 0.115	110	70.0 to 130	1.80	20.0
BC07361	Total Organic Carbon	mg/L	0.250	1.00	10.0	10.3	10.3	25.6		103	80.0 to 120	0.00	20.0

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGASGEB

**Sample Date:** 4/13/22 12:40

**Customer ID:**

**Delivery Date:** 4/14/22 11:53

**Description:** Gaston Gypsum Equipment Blank-1

**Laboratory ID Number:** BC07361

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC07361	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.02	-0.069	1.96	1.80 to 2.20	101	90.0 to 110	0.00	15.0
BC07360	Solids, Dissolved	mg/L	0.0000	25.0			241	49.0	40.0 to 60.0			3.67	10.0

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**Comments:**

# Definitions

**Project Number:** WMWGASG\_1359

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

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.



# Chain of Custody

## Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
	Collector: TJ Daugherty		Requested By
		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

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	04/12/2022	09:35	1	Groundwater		BC07369
MW-6	04/12/2022	11:15	1	Groundwater		BC07370
MW-7	04/12/2022	12:55	1	Groundwater		BC07371
MW-8	04/12/2022	14:28	1	Groundwater		BC07372
MW-9	04/12/2022	15:45	1	Groundwater		BC07373
MW-9 Dup	04/12/2022	15:45	1	Sample Duplicate		BC07374
MW-10	04/13/2022	10:05	1	Groundwater		BC07375
MW-10 Dup	04/13/2022	10:05	1	Sample Duplicate		BC07376
FB-1	04/13/2022	10:40	1	Field Blank		BC07377
MW-11	04/13/2022	11:33	1	Groundwater		BC07378
MW-12	04/13/2022	12:25	1	Groundwater		BC07379
EB-1	04/13/2022	12:40	1	Equipment Blank		BC07380

Relinquished By	Received By	Date/Time
		04/14/2022 10:15

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Turbidity ID	4677-23342-4-1		
Sample Event	1359		
		Cooler Temp	N/A
		Thermometer ID	N/A
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL







# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
	Collector: TJ Daugherty		Requested By
		Location	Gaston Gypsum

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

Comments: N/N & TOC pH<2. LBM 4/14/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	04/12/2022	09:35	7	Groundwater		BC07350
MW-6	04/12/2022	11:15	7	Groundwater		BC07351
MW-7	04/12/2022	12:55	7	Groundwater		BC07352
MW-8	04/12/2022	14:28	7	Groundwater		BC07353
MW-9	04/12/2022	15:45	7	Groundwater		BC07354
MW-9 Dup	04/12/2022	15:45	7	Sample Duplicate		BC07355
MW-10	04/13/2022	10:05	7	Groundwater		BC07356
MW-10 Dup	04/13/2022	10:05	7	Sample Duplicate		BC07357
FB-1	04/13/2022	10:40	5	Field Blank		BC07358
MW-11	04/13/2022	11:33	7	Groundwater		BC07359
MW-12	04/13/2022	12:25	7	Groundwater		BC07360
EB-1	04/13/2022	12:40	5	Equipment Blank		BC07361

Relinquished By	Received By	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	04/14/2022 10:15

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	
Sample Event	1359	
Cooler Temp	2.8 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	9772-56585-100-7	

Bottles/Pre-Preserved Bottles are provided by the GTL



May 26, 2022

Brooke Caton  
Alabama Power  
744 Highway 87  
Calera, AL 35040

RE: Project: WMWGASG\_1359  
Pace Project No.: 30481832

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on April 19, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,



Skyler C. Richmond  
skyler.richmond@pacelabs.com  
(724)850-5600  
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power  
Renee Jernigan, Alabama Power



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: WMWGASG\_1359  
Pace Project No.: 30481832

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### **Pace Analytical Services Pennsylvania**

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 460198  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: WMWGASG\_1359

Pace Project No.: 30481832

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30481832001	BC07362 MW-2	Water	04/12/22 11:05	04/19/22 09:20
30481832002	BC07363 MW-15	Water	04/12/22 14:16	04/19/22 09:20
30481832003	BC07364 MW-3	Water	04/12/22 15:51	04/19/22 09:20
30481832004	BC07365 MW-14S	Water	04/13/22 08:43	04/19/22 09:20
30481832005	BC07366 MW-1	Water	04/13/22 10:00	04/19/22 09:20
30481832006	BC07367 MW-13	Water	04/13/22 10:59	04/19/22 09:20
30481832007	BC07367 MW-13 MS	Water	04/13/22 10:59	04/19/22 09:20
30481832008	BC07367 MW-13 MSD	Water	04/13/22 10:59	04/19/22 09:20
30481832009	BC07368 FB-2	Water	04/13/22 11:25	04/19/22 09:20
30481832010	BC07369 MW-5	Water	04/12/22 09:35	04/19/22 09:20
30481832011	BC07370 MW-6	Water	04/12/22 11:15	04/19/22 09:20
30481832012	BC07371 MW-7	Water	04/12/22 12:55	04/19/22 09:20
30481832013	BC07372 MW-8	Water	04/12/22 14:28	04/19/22 09:20
30481832014	BC07373 MW-9	Water	04/12/22 15:45	04/19/22 09:20
30481832015	BC07374 MW-9 DUP	Water	04/12/22 15:45	04/19/22 09:20
30481832016	BC07375 MW-10	Water	04/13/22 10:05	04/19/22 09:20
30481832017	BC07376 MW-10 DUP	Water	04/13/22 10:05	04/19/22 09:20
30481832018	BC07377 FB-1	Water	04/13/22 10:40	04/19/22 09:20
30481832019	BC07378 MW-11	Water	04/13/22 11:33	04/19/22 09:20
30481832020	BC07379 MW-12	Water	04/13/22 12:25	04/19/22 09:20
30481832021	BC07380 EB-1	Water	04/13/22 12:40	04/19/22 09:20

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: WMWGASG\_1359  
Pace Project No.: 30481832

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30481832001	BC07362 MW-2	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832002	BC07363 MW-15	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832003	BC07364 MW-3	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832004	BC07365 MW-14S	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832005	BC07366 MW-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832006	BC07367 MW-13	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832007	BC07367 MW-13 MS	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832008	BC07367 MW-13 MSD	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832009	BC07368 FB-2	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832010	BC07369 MW-5	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832011	BC07370 MW-6	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832012	BC07371 MW-7	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832013	BC07372 MW-8	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: WMWGASG\_1359  
Pace Project No.: 30481832

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30481832014	BC07373 MW-9	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832015	BC07374 MW-9 DUP	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832016	BC07375 MW-10	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832017	BC07376 MW-10 DUP	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832018	BC07377 FB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832019	BC07378 MW-11	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832020	BC07379 MW-12	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30481832021	BC07380 EB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: WMWGASG\_1359  
Pace Project No.: 30481832

---

**Method:** EPA 9315  
**Description:** 9315 Total Radium  
**Client:** Alabama Power  
**Date:** May 26, 2022

**General Information:**

21 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: WMWGASG\_1359  
Pace Project No.: 30481832

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**Method:** EPA 9320  
**Description:** 9320 Radium 228  
**Client:** Alabama Power  
**Date:** May 26, 2022

**General Information:**

21 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: WMWGASG\_1359

Pace Project No.: 30481832

---

**Method:** Total Radium Calculation

**Description:** Total Radium 228+226

**Client:** Alabama Power

**Date:** May 26, 2022

**General Information:**

19 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07362 MW-2**      **Lab ID: 30481832001**      Collected: 04/12/22 11:05      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.217U ± 0.219 (0.412)</b> <b>C:100% T:NA</b>	pCi/L	05/04/22 13:15	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.318U ± 0.291 (0.586)</b> <b>C:81% T:88%</b>	pCi/L	05/05/22 16:08	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.535U ± 0.510 (0.998)</b>	pCi/L	05/09/22 17:21	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07363 MW-15**      **Lab ID: 30481832002**      Collected: 04/12/22 14:16      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.233U ± 0.214 (0.384)</b> <b>C:102% T:NA</b>	pCi/L	05/04/22 13:15	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.103U ± 0.263 (0.590)</b> <b>C:81% T:89%</b>	pCi/L	05/05/22 16:08	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.336U ± 0.477 (0.974)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07364 MW-3**      **Lab ID: 30481832003**      Collected: 04/12/22 15:51      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0518U ± 0.138 (0.339)</b> <b>C:103% T:NA</b>	pCi/L	05/04/22 16:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.267U ± 0.308 (0.647)</b> <b>C:78% T:92%</b>	pCi/L	05/05/22 16:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.319U ± 0.446 (0.986)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07365 MW-14S**      **Lab ID: 30481832004**      Collected: 04/13/22 08:43      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.127U ± 0.200 (0.442)</b> <b>C:100% T:NA</b>	pCi/L	05/04/22 16:22	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.0151U ± 0.286 (0.676)</b> <b>C:78% T:89%</b>	pCi/L	05/05/22 16:09	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.127U ± 0.486 (1.12)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07366 MW-1**      **Lab ID: 30481832005**      Collected: 04/13/22 10:00      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.867 ± 0.370 (0.401)</b> <b>C:102% T:NA</b>	pCi/L	05/04/22 16:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.438U ± 0.326 (0.634)</b> <b>C:79% T:90%</b>	pCi/L	05/05/22 16:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.31 ± 0.696 (1.04)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07367 MW-13**      **Lab ID: 30481832006**      Collected: 04/13/22 10:59      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.0738U ± 0.107 (0.398)</b> <b>C:101% T:NA</b>	pCi/L	05/04/22 16:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.357U ± 0.301 (0.600)</b> <b>C:83% T:92%</b>	pCi/L	05/05/22 16:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.357U ± 0.408 (0.998)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07367 MW-13 MS**      **Lab ID: 30481832007**      Collected: 04/13/22 10:59      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>100.17 %REC ± NA (NA)</b> <b>C:NA T:NA</b>	pCi/L	05/04/22 16:56	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>89.66 %REC ± NA (NA)</b> <b>C:NA T:NA</b>	pCi/L	05/05/22 16:09	15262-20-1	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07367 MW-13 MSD**      **Lab ID: 30481832008**      Collected: 04/13/22 10:59      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>100.62 %REC 0.44RPD ±</b> <b>NA (NA)</b> <b>C:NA T:NA</b>	pCi/L	05/04/22 16:56	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>96.86 %REC 7.71 RPD ±</b> <b>NA (NA)</b> <b>C:NA T:NA</b>	pCi/L	05/05/22 16:09	15262-20-1	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07368 FB-2**      **Lab ID: 30481832009**      Collected: 04/13/22 11:25      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0605U ± 0.162 (0.395)</b> <b>C:101% T:NA</b>	pCi/L	05/04/22 16:56	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.0536U ± 0.276 (0.634)</b> <b>C:82% T:85%</b>	pCi/L	05/05/22 16:09	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.114U ± 0.438 (1.03)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07369 MW-5**      **Lab ID: 30481832010**      Collected: 04/12/22 09:35      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.183U ± 0.200 (0.388)</b> <b>C:103% T:NA</b>	pCi/L	05/04/22 16:56	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.556U ± 0.341 (0.628)</b> <b>C:80% T:85%</b>	pCi/L	05/05/22 16:09	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.739U ± 0.541 (1.02)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07370 MW-6**      **Lab ID: 30481832011**      Collected: 04/12/22 11:15      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.157U ± 0.192 (0.388)</b> <b>C:100% T:NA</b>	pCi/L	05/04/22 16:56	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.0478U ± 0.271 (0.645)</b> <b>C:78% T:93%</b>	pCi/L	05/05/22 16:09	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.157U ± 0.463 (1.03)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07371 MW-7**      **Lab ID: 30481832012**      Collected: 04/12/22 12:55      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0248U ± 0.131 (0.350)</b> <b>C:97% T:NA</b>	pCi/L	05/06/22 08:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.127U ± 0.244 (0.606)</b> <b>C:79% T:91%</b>	pCi/L	05/05/22 16:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.0248U ± 0.375 (0.956)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07372 MW-8**      **Lab ID: 30481832013**      Collected: 04/12/22 14:28      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.235U ± 0.223 (0.421)</b> <b>C:100% T:NA</b>	pCi/L	05/06/22 08:43	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.132U ± 0.296 (0.657)</b> <b>C:74% T:87%</b>	pCi/L	05/05/22 16:09	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.367U ± 0.519 (1.08)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07373 MW-9**      **Lab ID: 30481832014**      Collected: 04/12/22 15:45      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.191U ± 0.194 (0.361)</b> <b>C:100% T:NA</b>	pCi/L	05/06/22 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.0379U ± 0.223 (0.543)</b> <b>C:76% T:91%</b>	pCi/L	05/05/22 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.191U ± 0.417 (0.904)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07374 MW-9 DUP**      **Lab ID: 30481832015**      Collected: 04/12/22 15:45      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.279U ± 0.239 (0.426)</b> <b>C:102% T:NA</b>	pCi/L	05/06/22 08:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.341U ± 0.326 (0.667)</b> <b>C:78% T:90%</b>	pCi/L	05/05/22 16:10	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.620U ± 0.565 (1.09)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07375 MW-10**      **Lab ID: 30481832016**      Collected: 04/13/22 10:05      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.242U ± 0.230 (0.430)</b> <b>C:101% T:NA</b>	pCi/L	05/06/22 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.309U ± 0.309 (0.637)</b> <b>C:78% T:96%</b>	pCi/L	05/05/22 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.551U ± 0.539 (1.07)</b>	pCi/L	05/09/22 17:21	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07376 MW-10 DUP**      **Lab ID: 30481832017**      Collected: 04/13/22 10:05      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.222U ± 0.222 (0.429)</b> <b>C:104% T:NA</b>	pCi/L	05/06/22 09:25	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.304U ± 0.278 (0.561)</b> <b>C:85% T:87%</b>	pCi/L	05/05/22 16:10	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.526U ± 0.500 (0.990)</b>	pCi/L	05/09/22 17:25	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BC07377 FB-1</b> <b>Lab ID: 30481832018</b> Collected: 04/13/22 10:40      Received: 04/19/22 09:20      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>-0.0568U ± 0.0863 (0.343)</b> <b>C:104% T:NA</b>	pCi/L	05/06/22 09:25	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.124U ± 0.252 (0.619)</b> <b>C:83% T:92%</b>	pCi/L	05/05/22 16:10	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.000U ± 0.338 (0.962)</b>	pCi/L	05/09/22 17:25	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07378 MW-11**      **Lab ID: 30481832019**      Collected: 04/13/22 11:33      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.101U ± 0.170 (0.379)</b> <b>C:104% T:NA</b>	pCi/L	05/06/22 09:25	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.352U ± 0.277 (0.539)</b> <b>C:81% T:91%</b>	pCi/L	05/05/22 16:10	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.453U ± 0.447 (0.918)</b>	pCi/L	05/09/22 17:25	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07379 MW-12**      **Lab ID: 30481832020**      Collected: 04/13/22 12:25      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.119U ± 0.174 (0.373)</b> <b>C:103% T:NA</b>	pCi/L	05/06/22 09:25	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.138U ± 0.285 (0.630)</b> <b>C:80% T:87%</b>	pCi/L	05/05/22 16:10	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.257U ± 0.459 (1.00)</b>	pCi/L	05/09/22 17:25	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

**Sample: BC07380 EB-1**      **Lab ID: 30481832021**      Collected: 04/13/22 12:40      Received: 04/19/22 09:20      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0738U ± 0.162 (0.382)</b> <b>C:102% T:NA</b>	pCi/L	05/06/22 09:25	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.210U ± 0.467 (1.03)</b> <b>C:70% T:87%</b>	pCi/L	05/24/22 15:16	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.284U ± 0.629 (1.41)</b>	pCi/L	05/25/22 18:12	7440-14-4	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

QC Batch: 499049

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30481832017, 30481832018, 30481832019, 30481832020, 30481832021

METHOD BLANK: 2415382

Matrix: Water

Associated Lab Samples: 30481832017, 30481832018, 30481832019, 30481832020, 30481832021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0189 ± 0.0634 (0.159) C:104% T:NA	pCi/L	05/06/22 09:25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGASG\_1359

Pace Project No.: 30481832

QC Batch: 503480

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30481832021

METHOD BLANK: 2437885

Matrix: Water

Associated Lab Samples: 30481832021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.239 ± 0.295 (0.623) C:79% T:89%	pCi/L	05/24/22 15:21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: WMWGASG\_1359  
Pace Project No.: 30481832

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### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGASG\_1359  
Pace Project No.: 30481832

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30481832001	BC07362 MW-2	EPA 9315	499047		
30481832002	BC07363 MW-15	EPA 9315	499047		
30481832003	BC07364 MW-3	EPA 9315	499047		
30481832004	BC07365 MW-14S	EPA 9315	499047		
30481832005	BC07366 MW-1	EPA 9315	499047		
30481832006	BC07367 MW-13	EPA 9315	499047		
30481832007	BC07367 MW-13 MS	EPA 9315	499047		
30481832008	BC07367 MW-13 MSD	EPA 9315	499047		
30481832009	BC07368 FB-2	EPA 9315	499047		
30481832010	BC07369 MW-5	EPA 9315	499047		
30481832011	BC07370 MW-6	EPA 9315	499047		
30481832012	BC07371 MW-7	EPA 9315	499047		
30481832013	BC07372 MW-8	EPA 9315	499047		
30481832014	BC07373 MW-9	EPA 9315	499047		
30481832015	BC07374 MW-9 DUP	EPA 9315	499047		
30481832016	BC07375 MW-10	EPA 9315	499047		
30481832017	BC07376 MW-10 DUP	EPA 9315	499049		
30481832018	BC07377 FB-1	EPA 9315	499049		
30481832019	BC07378 MW-11	EPA 9315	499049		
30481832020	BC07379 MW-12	EPA 9315	499049		
30481832021	BC07380 EB-1	EPA 9315	499049		
30481832001	BC07362 MW-2	EPA 9320	499362		
30481832002	BC07363 MW-15	EPA 9320	499362		
30481832003	BC07364 MW-3	EPA 9320	499362		
30481832004	BC07365 MW-14S	EPA 9320	499362		
30481832005	BC07366 MW-1	EPA 9320	499362		
30481832006	BC07367 MW-13	EPA 9320	499362		
30481832007	BC07367 MW-13 MS	EPA 9320	499362		
30481832008	BC07367 MW-13 MSD	EPA 9320	499362		
30481832009	BC07368 FB-2	EPA 9320	499362		
30481832010	BC07369 MW-5	EPA 9320	499362		
30481832011	BC07370 MW-6	EPA 9320	499362		
30481832012	BC07371 MW-7	EPA 9320	499362		
30481832013	BC07372 MW-8	EPA 9320	499362		
30481832014	BC07373 MW-9	EPA 9320	499362		
30481832015	BC07374 MW-9 DUP	EPA 9320	499362		
30481832016	BC07375 MW-10	EPA 9320	499362		
30481832017	BC07376 MW-10 DUP	EPA 9320	499362		
30481832018	BC07377 FB-1	EPA 9320	499362		
30481832019	BC07378 MW-11	EPA 9320	499362		
30481832020	BC07379 MW-12	EPA 9320	499362		
30481832021	BC07380 EB-1	EPA 9320	503480		
30481832001	BC07362 MW-2	Total Radium Calculation	503153		
30481832002	BC07363 MW-15	Total Radium Calculation	503153		
30481832003	BC07364 MW-3	Total Radium Calculation	503153		
30481832004	BC07365 MW-14S	Total Radium Calculation	503153		
30481832005	BC07366 MW-1	Total Radium Calculation	503153		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGASG\_1359  
Pace Project No.: 30481832

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30481832006	BC07367 MW-13	Total Radium Calculation	503153		
30481832009	BC07368 FB-2	Total Radium Calculation	503153		
30481832010	BC07369 MW-5	Total Radium Calculation	503153		
30481832011	BC07370 MW-6	Total Radium Calculation	503153		
30481832012	BC07371 MW-7	Total Radium Calculation	503153		
30481832013	BC07372 MW-8	Total Radium Calculation	503153		
30481832014	BC07373 MW-9	Total Radium Calculation	503153		
30481832015	BC07374 MW-9 DUP	Total Radium Calculation	503153		
30481832016	BC07375 MW-10	Total Radium Calculation	503153		
30481832017	BC07376 MW-10 DUP	Total Radium Calculation	503154		
30481832018	BC07377 FB-1	Total Radium Calculation	503154		
30481832019	BC07378 MW-11	Total Radium Calculation	503154		
30481832020	BC07379 MW-12	Total Radium Calculation	503154		
30481832021	BC07380 EB-1	Total Radium Calculation	507038		

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information: Company: Alabama Power Company Address: 744 Highway 87 GSC Bldg #8 Calera, AL 35040 Email To: lbmidkiff@southernco.com Phone: 205-664-6197 Fax Requested Due Date: 28 days	<b>Section B</b> Required Project Information: Report To: Laura Midkiff Copy To: Brooke Caton & Renee Jernigan Purchase Order #: APC10755638 Project Name: Plant Gaston Gypsum Storage Area Project Number: WIMWGASG_1359
<b>Section C</b> Invoice Information: Attention: Laura Midkiff Company Name: Alabama Power Co. Address: 744 Highway 87 GSC Bldg #8 City: CCR State / Location: AL Zip: 16788 Face Project Manager: Skyler Richmond Face Profile #: 16788	Regulatory Agency: State / Location: AL

ITEM #	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Mark Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives	Analytes Test	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
									DATE	TIME								
1	MW-5	APCO-GN-GSA-MW-5	APCO_Gaston_GypsumStore				GM	G	4/12/2022	9:35	1							
2	MW-6	APCO-GN-GSA-MW-6	APCO_Gaston_GypsumStore				GM	G	4/12/2022	11:15	1							
3	MW-7	APCO-GN-GSA-MW-7	APCO_Gaston_GypsumStore				GM	G	4/12/2022	12:55	1							
4	MW-8	APCO-GN-GSA-MW-8	APCO_Gaston_GypsumStore				GM	G	4/12/2022	14:28	1							
5	MW-9	APCO-GN-GSA-MW-9	APCO_Gaston_GypsumStore				GM	G	4/12/2022	15:45	1							
6	MW-9 DUP	APCO-GN-GSA-MW-9	APCO_Gaston_GypsumStore	X			GM	G	4/12/2022	15:45	1							
7	MW-10	APCO-GN-GSA-MW-10	APCO_Gaston_GypsumStore				GM	G	4/12/2022	10:05	1							
8	MW-10 DUP	APCO-GN-GSA-MW-10	APCO_Gaston_GypsumStore	X			GM	G	4/12/2022	10:05	1							
9	FB-1	APCO-GN-GSA-FB-1	APCO_Gaston_GypsumStore				GM	G	4/13/2022	10:40	1							
10	MW-11	APCO-GN-GSA-MW-11	APCO_Gaston_GypsumStore				GM	G	4/13/2022	11:33	1							
11	MW-12	APCO-GN-GSA-MW-12	APCO_Gaston_GypsumStore				GM	G	4/13/2022	12:25	1							
12	EB-1	APCO-GN-GSA-EB-1	APCO_Gaston_GypsumStore				GM	G	4/13/2022	12:40	1							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION		DATE	TIME	DATE	TIME	SAMPLE CONDITIONS
	NAME	AFFILIATION	NAME	AFFILIATION					
	Laura Midkiff	APC GTL			4/15/2022	9:05			

<b>SAMPLER NAME AND SIGNATURE</b>	<b>TEMP IN C</b>
PRINT Name of SAMPLER:	
SIGNATURE of SAMPLER:	
T.J Daugherty	

NO#: 30481832

PM: SCR Due Date: 05/10/22  
 CLIENT: ALABAMA PWR



Pittsburgh Lab Sample Condition Upon Receipt



Client Name: Alabama Power

Project # 30481832

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_

Label JBH  
LIMS Login VP

Tracking #: 5701 6585 0474

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Thermometer Used NA Type of Ice: Wet Blue None

Cooler Temperature Observed Temp \_\_\_\_\_ °C Correction Factor: \_\_\_\_\_ °C Final Temp: \_\_\_\_\_ °C

Temp should be above freezing to 6°C

Comments:	pH paper Lot#			Date and initials of person examining contents:	
	Yes	No	N/A		
Chain of Custody Present:	/			10D 2811	JBH 4.19.22
Chain of Custody Filled Out:	/				
Chain of Custody Relinquished:	/				
Sampler Name & Signature on COC:		/		4. NO Signature	
Sample Labels match COC: -Includes date/time/ID Matrix: <u>WT</u>	/				
Samples Arrived within Hold Time:	/				
Short Hold Time Analysis (<72hr remaining):		/			
Rush Turn Around Time Requested:		/			
Sufficient Volume:	/				
Correct Containers Used: -Pace Containers Used:	/				
Containers Intact:	/				
Orthophosphate field filtered			/		
Hex Cr Aqueous sample field filtered			/		
Organic Samples checked for dechlorination:			/		
Filtered volume received for Dissolved tests			/		
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	/			16. PHL2	
All containers meet method preservation requirements.	/			Initial when completed: JBH	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):			/		
Trip Blank Present:			/		
Trip Blank Custody Seals Present			/		
Rad Samples Screened < 0.5 mrem/hr	/			Initial when completed: JBH	Date: 4.19.22 Survey Meter SN: 1563

Client Notification/ Resolution:

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted By: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

\*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

# Quality Control Sample Performance Assessment



**Analyst Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226  
Analyst: JC2  
Date: 4/26/2022  
Worklist: 66277  
Matrix: DW

Method Blank Assessment	
MB Sample ID	2415377
MB concentration:	0.017
M/B Counting Uncertainty:	0.062
MB MDC:	0.159
MB Numerical Performance Indicator:	0.55
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

LCS/D (Y or N)?	Y	
	LCS/D66277	LCS/D6277
Count Date:	5/6/2022	5/6/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.027	24.027
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.505
Target Conc. (pCi/L, g, F):	4.797	4.754
Uncertainty (Calculated):	0.058	0.057
Result (pCi/L, g, F):	5.749	4.912
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.513	0.477
Numerical Performance Indicator:	3.62	0.64
Percent Recovery:	119.86%	103.32%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment	
Sample I.D.:	LCS66277
Duplicate Sample I.D.:	LCS/D66277
Sample Result (pCi/L, g, F):	5.749
Sample Duplicate Result (pCi/L, g, F):	0.513
Sample Result Counting Uncertainty (pCi/L, g, F):	4.912
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.477
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	2.342
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	14.82%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

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

Comments:

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	4/13/2022		
Sample I.D.:	30481832006		
Sample MS I.D.:	30481832007		
Sample MSD I.D.:	30481832008		
Spike I.D.:	19-033		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.028		
Spike Volume Used in MS (mL):	0.40		
MS Aliquot (L, g, F):	0.202		
MS Target Conc. (pCi/L, g, F):	47.517		
MSD Aliquot (L, g, F):	0.205		
MSD Target Conc. (pCi/L, g, F):	46.816		
MS Spike Uncertainty (calculated):	0.570		
MSD Spike Uncertainty (calculated):	0.562		
Sample Result:	-0.074		
Sample Result Counting Uncertainty (pCi/L, g, F):	0.107		
Sample Matrix Spike Result:	47.525		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	2.447		
Sample Matrix Spike Duplicate Result:	47.030		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	2.320		
MS Numerical Performance Indicator:	0.064		
MSD Numerical Performance Indicator:	0.236		
MS Percent Recovery:	100.17%		
MSD Percent Recovery:	100.62%		
MS Status vs Numerical Indicator:	N/A		
MSD Status vs Numerical Indicator:	N/A		
MS Status vs Recovery:	Pass		
MSD Status vs Recovery:	Pass		
MS/MSD Upper % Recovery Limits:	125%		
MS/MSD Lower % Recovery Limits:	75%		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30481832006
Sample MS I.D.:	30481832007
Sample MSD I.D.:	30481832008
Sample Matrix Spike Result:	47.525
Sample Matrix Spike Duplicate Result:	47.030
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	2.447
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	2.320
Duplicate Numerical Performance Indicator:	0.288
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	0.44%
MS/MSD Duplicate Status vs Numerical Indicator:	N/A
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

VAMS 10/22

5/16/2022

# Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.



Test: Ra-226  
Analyst: JC2  
Date: 4/26/2022  
Worklist: 66278  
Matrix: DW

Method Blank Assessment	
MB Sample ID	2415382
MB Concentration:	0.019
M/B Counting Uncertainty:	0.063
MB MDC:	0.159
MB Numerical Performance Indicator:	0.58
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCSD (Y or N)?	Y
Count Date:		LCS66278	5/6/2022
Spike I.D.:		19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):		24.027	24.027
Volume Used (mL):		0.10	0.10
Aliquot Volume (L, g, F):		0.502	0.506
Target Conc. (pCi/L, g, F):		4.787	4.748
Uncertainty (Calculated):		0.057	0.057
Result (pCi/L, g, F):		4.445	4.739
LCS/LCSD Counting Uncertainty (pCi/L, g, F):		0.459	0.466
Numerical Performance Indicator:		-1.45	-0.03
Percent Recovery:		92.87%	99.82%
Status vs Numerical Indicator:		N/A	N/A
Status vs Recovery:		Pass	Pass
Upper % Recovery Limits:		125%	125%
Lower % Recovery Limits:		75%	75%

Duplicate Sample Assessment		
Sample I.D.:		LCS66278
Duplicate Sample I.D.:		LCS66278
Sample Result (pCi/L, g, F):		4.445
Sample Result Counting Uncertainty (pCi/L, g, F):		0.459
Sample Duplicate Result (pCi/L, g, F):		4.739
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		0.466
Are sample and/or duplicate results below RL?		NO
Duplicate Numerical Performance Indicator:		-0.882
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:		7.22%
Duplicate Status vs Numerical Indicator:		N/A
Duplicate Status vs RPD:		Pass
% RPD Limit:		25%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
<p>Sample Collection Date: Sample I.D. Sample MS I.D. Sample MSD I.D. Spike I.D.:</p> <p>MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated):</p> <p>Sample Result: Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator:</p> <p>MS Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits:</p>		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
<p>Sample I.D. Sample MS I.D. Sample MSD I.D.</p> <p>Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F): Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:</p>

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

Comments:

*Handwritten notes:*  
5/10/2022  
LAMS/6/22

# Quality Control Sample Performance Assessment



**Analyst Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-228  
Analyst: JSM  
Date: 5/2/2022  
Worklist: 66327  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2416872
MB concentration:	0.533
MB 2 Sigma CSU:	0.316
MB MDC:	0.580
MB Numerical Performance Indicator:	3.30
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCS (Y or N)?	N
		LCS66327	LCSD66327
Count Date:	5/5/2022		
Spike ID:	22-016		
Decay Corrected Spike Concentration (pCi/mL):	35.860		
Volume Used (mL):	0.10		
Aliquot Volume (L, g, F):	0.817		
Target Conc. (pCi/L, g, F):	4.389		
Uncertainty (Calculated):	0.215		
Result (pCi/L, g, F):	4.126		
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.943		
Numerical Performance Indicator:	-0.53		
Percent Recovery:	94.01%		
Status vs Numerical Indicator:	N/A		
Status vs Recovery:	Pass		
Upper % Recovery Limits:	135%		
Lower % Recovery Limits:	60%		

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	4/13/2022		
Sample I.D.:	30481832006		
Sample MS I.D.:	30481832007		
Sample MSD I.D.:	30481832008		
Spike I.D.:	22-016		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.123		
Spike Volume Used in MS (mL):	0.20		
Spike Volume Used in MSD (mL):	0.20		
MS Aliquot (L, g, F):	0.806		
MS Target Conc. (pCi/L, g, F):	8.960		
MSD Aliquot (L, g, F):	0.812		
MSD Target Conc. (pCi/L, g, F):	8.897		
MS Spike Uncertainty (calculated):	0.439		
MSD Spike Uncertainty (calculated):	0.436		
Sample Result:	0.357		
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.301		
Sample Matrix Spike Result:	8.391		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.682		
Sample Matrix Spike Duplicate Result:	8.974		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.798		
MS Numerical Performance Indicator:	-1.029		
MSD Numerical Performance Indicator:	-0.292		
MS Percent Recovery:	89.66%		
MSD Percent Recovery:	96.86%		
MS Status vs Numerical Indicator:	Pass		
MSD Status vs Numerical Indicator:	Pass		
MS Status vs Recovery:	Pass		
MSD Status vs Recovery:	Pass		
MS/MSD Upper % Recovery Limits:	135%		
MS/MSD Lower % Recovery Limits:	60%		

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30481832006
Sample MS I.D.:	30481832007
Sample MSD I.D.:	30481832008
Sample Matrix Spike Result:	8.391
Sample Matrix Spike Duplicate Result:	8.974
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.682
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.798
Duplicate Numerical Performance Indicator:	-0.464
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	7.71%
MS/MSD Duplicate Status vs Numerical Indicator:	Pass
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

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

Comments:

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

05/10/22

VIA JAW 5/19/22

VAZ  
5/6/22

# Quality Control Sample Performance Assessment



**Analyst Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-228  
Analyst: VAL  
Date: 5/13/2022  
Worklist: 66646  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2437885
MB concentration:	0.239
M/B 2 Sigma CSU:	0.295
MB MDC:	0.623
MB Numerical Performance Indicator:	1.59
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCS/D (Y or N)?	N
		LCS66646	LCS/D66646
Count Date:	5/24/2022		
Spike ID.:	22-016		
Decay Corrected Spike Concentration (pCi/mL):	35.637		
Volume Used (mL):	0.10		
Aliquot Volume (L, g, F):	0.814		
Target Conc. (pCi/L, g, F):	4.377		
Uncertainty (Calculated):	0.214		
Result (pCi/L, g, F):	4.173		
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.975		
Numerical Performance Indicator:	-0.40		
Percent Recovery:	95.35%		
Status vs Numerical Indicator:	N/A		
Status vs Recovery:	Pass		
Upper % Recovery Limits:	135%		
Lower % Recovery Limits:	60%		

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

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

Comments:

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	4/20/2022		
Sample I.D.:	30487979007		
Sample MS I.D.:	30487979008		
Sample MSD I.D.:	30487979009		
Spike I.D.:	22-016		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.039		
Spike Volume Used in MS (mL):	0.20		
Spike Volume Used in MSD (mL):	0.20		
MS Aliquot (L, g, F):	0.801		
MS Target Conc. (pCi/L, g, F):	8.997		
MSD Aliquot (L, g, F):	0.801		
MSD Target Conc. (pCi/L, g, F):	9.003		
MS Spike Uncertainty (calculated):	0.441		
MSD Spike Uncertainty (calculated):	0.441		
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.848		
Sample Matrix Spike Result:	0.582		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	10.077		
Sample Matrix Spike Duplicate Result:	2.119		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	9.483		
MS Numerical Performance Indicator:	1.984		
MSD Numerical Performance Indicator:	0.204		
MS Percent Recovery:	-0.340		
MSD Percent Recovery:	102.59%		
MS Status vs Numerical Indicator:	95.91%		
MS Status vs Recovery:	Pass		
MSD Status vs Numerical Indicator:	Pass		
MSD Status vs Recovery:	Pass		
MS/MSD Upper % Recovery Limits:	135%		
MS/MSD Lower % Recovery Limits:	60%		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30487979007
Sample MS I.D.:	30487979008
Sample MSD I.D.:	30487979009
Sample Matrix Spike Result:	10.077
Sample Matrix Spike Duplicate Result:	2.119
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	9.483
Duplicate Numerical Performance Indicator:	1.984
Duplicate Numerical Performance Indicator:	0.400
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	6.73%
MS/MSD Duplicate Status vs Numerical Indicator:	Pass
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

VAC  
5/25/22

OK 5/25/22

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**

### **2022 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).

Landscape crews were cutting grass approximately 50 feet away from well MW-2 when pumping and sampling.

Rainy conditions were present when pumping and sampling well MW-10.

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.



**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-1	COND	Conductivity	365.75	uS/cm
GN-GSA-MW-1	DO	DO	0.24	mg/L
GN-GSA-MW-1	DTW	Depth to Water Detail	30.92	ft
GN-GSA-MW-1	ORP	Oxidation Reduction Potention	-125.74	mv
GN-GSA-MW-1	PH	pH	7.47	SU
GN-GSA-MW-1	TEMP	Temperature	21.21	C
GN-GSA-MW-1	TURB	Turbidity	1.18	NTU
GN-GSA-MW-1	COND	Conductivity	353.17	uS/cm
GN-GSA-MW-1	DO	DO	0.19	mg/L
GN-GSA-MW-1	DTW	Depth to Water Detail	31.2	ft
GN-GSA-MW-1	ORP	Oxidation Reduction Potention	-130.81	mv
GN-GSA-MW-1	PH	pH	7.47	SU
GN-GSA-MW-1	TEMP	Temperature	21.12	C
GN-GSA-MW-1	TURB	Turbidity	0.97	NTU
GN-GSA-MW-1	COND	Conductivity	343.15	uS/cm
GN-GSA-MW-1	DO	DO	0.16	mg/L
GN-GSA-MW-1	DTW	Depth to Water Detail	31.42	ft
GN-GSA-MW-1	ORP	Oxidation Reduction Potention	-134.47	mv
GN-GSA-MW-1	PH	pH	7.46	SU
GN-GSA-MW-1	TEMP	Temperature	20.87	C
GN-GSA-MW-1	TURB	Turbidity	0.8	NTU
GN-GSA-MW-1	COND	Conductivity	339.67	uS/cm
GN-GSA-MW-1	DO	DO	0.14	mg/L
GN-GSA-MW-1	DTW	Depth to Water Detail	31.61	ft
GN-GSA-MW-1	ORP	Oxidation Reduction Potention	-136.97	mv
GN-GSA-MW-1	PH	pH	7.47	SU
GN-GSA-MW-1	TEMP	Temperature	20.74	C
GN-GSA-MW-1	TURB	Turbidity	0.88	NTU
GN-GSA-MW-1	COND	Conductivity	336.77	uS/cm
GN-GSA-MW-1	DO	DO	0.13	mg/L
GN-GSA-MW-1	DTW	Depth to Water Detail	31.75	ft
GN-GSA-MW-1	ORP	Oxidation Reduction Potention	-137.21	mv
GN-GSA-MW-1	PH	pH	7.47	SU
GN-GSA-MW-1	TEMP	Temperature	20.63	C
GN-GSA-MW-1	TURB	Turbidity	0.96	NTU
GN-GSA-MW-1	COND	Conductivity	336.43	uS/cm
GN-GSA-MW-1	DO	DO	0.13	mg/L
GN-GSA-MW-1	DTW	Depth to Water Detail	31.88	ft
GN-GSA-MW-1	ORP	Oxidation Reduction Potention	-135.73	mv
GN-GSA-MW-1	PH	pH	7.46	SU
GN-GSA-MW-1	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-1	TEMP	Temperature	20.53	C
GN-GSA-MW-1	TURB	Turbidity	0.79	NTU



**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-2	COND	Conductivity	619.52	uS/cm
GN-GSA-MW-2	DO	DO	1.27	mg/L
GN-GSA-MW-2	DTW	Depth to Water Detail	22.45	ft
GN-GSA-MW-2	ORP	Oxidation Reduction Potention	41.01	mv
GN-GSA-MW-2	PH	pH	6.99	SU
GN-GSA-MW-2	TEMP	Temperature	21.12	C
GN-GSA-MW-2	TURB	Turbidity	1.61	NTU
GN-GSA-MW-2	COND	Conductivity	596.86	uS/cm
GN-GSA-MW-2	DO	DO	2.15	mg/L
GN-GSA-MW-2	DTW	Depth to Water Detail	22.61	ft
GN-GSA-MW-2	ORP	Oxidation Reduction Potention	180.8	mv
GN-GSA-MW-2	PH	pH	7	SU
GN-GSA-MW-2	TEMP	Temperature	21.07	C
GN-GSA-MW-2	TURB	Turbidity	1.49	NTU
GN-GSA-MW-2	COND	Conductivity	571.09	uS/cm
GN-GSA-MW-2	DO	DO	2.5	mg/L
GN-GSA-MW-2	DTW	Depth to Water Detail	22.8	ft
GN-GSA-MW-2	ORP	Oxidation Reduction Potention	193.69	mv
GN-GSA-MW-2	PH	pH	7.03	SU
GN-GSA-MW-2	TEMP	Temperature	20.99	C
GN-GSA-MW-2	TURB	Turbidity	1.22	NTU
GN-GSA-MW-2	COND	Conductivity	568.68	uS/cm
GN-GSA-MW-2	DO	DO	2.55	mg/L
GN-GSA-MW-2	DTW	Depth to Water Detail	22.94	ft
GN-GSA-MW-2	ORP	Oxidation Reduction Potention	196.8	mv
GN-GSA-MW-2	PH	pH	7.04	SU
GN-GSA-MW-2	TEMP	Temperature	21.08	C
GN-GSA-MW-2	TURB	Turbidity	1.31	NTU
GN-GSA-MW-2	COND	Conductivity	574.67	uS/cm
GN-GSA-MW-2	DO	DO	2.55	mg/L
GN-GSA-MW-2	DTW	Depth to Water Detail	23.08	ft
GN-GSA-MW-2	ORP	Oxidation Reduction Potention	200.92	mv
GN-GSA-MW-2	PH	pH	7.04	SU
GN-GSA-MW-2	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-2	TEMP	Temperature	21.34	C
GN-GSA-MW-2	TURB	Turbidity	1.4	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-3	COND	Conductivity	289.2	uS/cm
GN-GSA-MW-3	DO	DO	1.36	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	22.79	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	148.83	mv
GN-GSA-MW-3	PH	pH	6.12	SU
GN-GSA-MW-3	TEMP	Temperature	22.18	C
GN-GSA-MW-3	TURB	Turbidity	1.07	NTU
GN-GSA-MW-3	COND	Conductivity	275.47	uS/cm
GN-GSA-MW-3	DO	DO	1.27	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	23.69	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	164.28	mv
GN-GSA-MW-3	PH	pH	6.09	SU
GN-GSA-MW-3	TEMP	Temperature	21.91	C
GN-GSA-MW-3	TURB	Turbidity	1.68	NTU
GN-GSA-MW-3	COND	Conductivity	267.3	uS/cm
GN-GSA-MW-3	DO	DO	2.02	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	24.3	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	170.73	mv
GN-GSA-MW-3	PH	pH	6.13	SU
GN-GSA-MW-3	TEMP	Temperature	21.79	C
GN-GSA-MW-3	TURB	Turbidity	1.49	NTU
GN-GSA-MW-3	COND	Conductivity	269.61	uS/cm
GN-GSA-MW-3	DO	DO	2.57	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	24.88	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	174.4	mv
GN-GSA-MW-3	PH	pH	6.17	SU
GN-GSA-MW-3	TEMP	Temperature	21.74	C
GN-GSA-MW-3	TURB	Turbidity	1.84	NTU
GN-GSA-MW-3	COND	Conductivity	274.56	uS/cm
GN-GSA-MW-3	DO	DO	2.59	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	25.3	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	176.95	mv
GN-GSA-MW-3	PH	pH	6.18	SU
GN-GSA-MW-3	TEMP	Temperature	21.7	C
GN-GSA-MW-3	TURB	Turbidity	2.45	NTU
GN-GSA-MW-3	COND	Conductivity	279.68	uS/cm
GN-GSA-MW-3	DO	DO	2.51	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	25.81	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	177.34	mv
GN-GSA-MW-3	PH	pH	6.2	SU
GN-GSA-MW-3	TEMP	Temperature	21.7	C
GN-GSA-MW-3	TURB	Turbidity	2.12	NTU
GN-GSA-MW-3	COND	Conductivity	284.78	uS/cm
GN-GSA-MW-3	DO	DO	2.44	mg/L

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-3	DTW	Depth to Water Detail	26.18	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	178.71	mv
GN-GSA-MW-3	PH	pH	6.2	SU
GN-GSA-MW-3	TEMP	Temperature	21.66	C
GN-GSA-MW-3	TURB	Turbidity	1.69	NTU
GN-GSA-MW-3	COND	Conductivity	289.27	uS/cm
GN-GSA-MW-3	DO	DO	2.38	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	26.47	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	179.24	mv
GN-GSA-MW-3	PH	pH	6.22	SU
GN-GSA-MW-3	TEMP	Temperature	21.75	C
GN-GSA-MW-3	TURB	Turbidity	1.65	NTU
GN-GSA-MW-3	COND	Conductivity	293.64	uS/cm
GN-GSA-MW-3	DO	DO	2.26	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	26.63	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	178.4	mv
GN-GSA-MW-3	PH	pH	6.24	SU
GN-GSA-MW-3	TEMP	Temperature	21.88	C
GN-GSA-MW-3	TURB	Turbidity	1.28	NTU
GN-GSA-MW-3	COND	Conductivity	299.77	uS/cm
GN-GSA-MW-3	DO	DO	2.18	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	26.79	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	179.05	mv
GN-GSA-MW-3	PH	pH	6.24	SU
GN-GSA-MW-3	TEMP	Temperature	22.07	C
GN-GSA-MW-3	TURB	Turbidity	1.18	NTU
GN-GSA-MW-3	COND	Conductivity	307.36	uS/cm
GN-GSA-MW-3	DO	DO	2.08	mg/L
GN-GSA-MW-3	DTW	Depth to Water Detail	26.9	ft
GN-GSA-MW-3	ORP	Oxidation Reduction Potention	179.75	mv
GN-GSA-MW-3	PH	pH	6.25	SU
GN-GSA-MW-3	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-3	TEMP	Temperature	21.9	C
GN-GSA-MW-3	TURB	Turbidity	1.24	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-12	COND	Conductivity	405.7	uS/cm
GN-GSA-MW-12	DO	DO	0.25	mg/L
GN-GSA-MW-12	DTW	Depth to Water Detail	20.89	ft
GN-GSA-MW-12	ORP	Oxidation Reduction Potention	145.92	mv
GN-GSA-MW-12	PH	pH	6.89	SU
GN-GSA-MW-12	TEMP	Temperature	20.87	C
GN-GSA-MW-12	TURB	Turbidity	1.69	NTU
GN-GSA-MW-12	COND	Conductivity	388.23	uS/cm
GN-GSA-MW-12	DO	DO	0.25	mg/L
GN-GSA-MW-12	DTW	Depth to Water Detail	20.89	ft
GN-GSA-MW-12	ORP	Oxidation Reduction Potention	132.99	mv
GN-GSA-MW-12	PH	pH	6.87	SU
GN-GSA-MW-12	TEMP	Temperature	20.87	C
GN-GSA-MW-12	TURB	Turbidity	1.42	NTU
GN-GSA-MW-12	COND	Conductivity	382.57	uS/cm
GN-GSA-MW-12	DO	DO	0.18	mg/L
GN-GSA-MW-12	DTW	Depth to Water Detail	20.89	ft
GN-GSA-MW-12	ORP	Oxidation Reduction Potention	123.25	mv
GN-GSA-MW-12	PH	pH	6.84	SU
GN-GSA-MW-12	TEMP	Temperature	20.92	C
GN-GSA-MW-12	TURB	Turbidity	1.31	NTU
GN-GSA-MW-12	COND	Conductivity	382.7	uS/cm
GN-GSA-MW-12	DO	DO	0.15	mg/L
GN-GSA-MW-12	DTW	Depth to Water Detail	20.89	ft
GN-GSA-MW-12	ORP	Oxidation Reduction Potention	115.91	mv
GN-GSA-MW-12	PH	pH	6.82	SU
GN-GSA-MW-12	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-12	TEMP	Temperature	20.92	C
GN-GSA-MW-12	TURB	Turbidity	1.14	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-13	COND	Conductivity	595.4	uS/cm
GN-GSA-MW-13	DO	DO	0.91	mg/L
GN-GSA-MW-13	DTW	Depth to Water Detail	25.31	ft
GN-GSA-MW-13	ORP	Oxidation Reduction Potention	204.99	mv
GN-GSA-MW-13	PH	pH	6.96	SU
GN-GSA-MW-13	TEMP	Temperature	20.13	C
GN-GSA-MW-13	TURB	Turbidity	1.44	NTU
GN-GSA-MW-13	COND	Conductivity	576.21	uS/cm
GN-GSA-MW-13	DO	DO	0.89	mg/L
GN-GSA-MW-13	DTW	Depth to Water Detail	25.31	ft
GN-GSA-MW-13	ORP	Oxidation Reduction Potention	202.46	mv
GN-GSA-MW-13	PH	pH	6.95	SU
GN-GSA-MW-13	TEMP	Temperature	20.24	C
GN-GSA-MW-13	TURB	Turbidity	0.94	NTU
GN-GSA-MW-13	COND	Conductivity	568.66	uS/cm
GN-GSA-MW-13	DO	DO	0.83	mg/L
GN-GSA-MW-13	DTW	Depth to Water Detail	25.31	ft
GN-GSA-MW-13	ORP	Oxidation Reduction Potention	199.27	mv
GN-GSA-MW-13	PH	pH	6.94	SU
GN-GSA-MW-13	TEMP	Temperature	20.31	C
GN-GSA-MW-13	TURB	Turbidity	1.21	NTU
GN-GSA-MW-13	COND	Conductivity	564.9	uS/cm
GN-GSA-MW-13	DO	DO	0.81	mg/L
GN-GSA-MW-13	DTW	Depth to Water Detail	25.31	ft
GN-GSA-MW-13	ORP	Oxidation Reduction Potention	197.48	mv
GN-GSA-MW-13	PH	pH	6.92	SU
GN-GSA-MW-13	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-13	TEMP	Temperature	20.31	C
GN-GSA-MW-13	TURB	Turbidity	0.98	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-14S	COND	Conductivity	353.25	uS/cm
GN-GSA-MW-14S	DO	DO	1.76	mg/L
GN-GSA-MW-14S	DTW	Depth to Water Detail	23.36	ft
GN-GSA-MW-14S	ORP	Oxidation Reduction Potention	150.59	mv
GN-GSA-MW-14S	PH	pH	6.72	SU
GN-GSA-MW-14S	TEMP	Temperature	20.76	C
GN-GSA-MW-14S	TURB	Turbidity	2.87	NTU
GN-GSA-MW-14S	COND	Conductivity	360.51	uS/cm
GN-GSA-MW-14S	DO	DO	1.48	mg/L
GN-GSA-MW-14S	DTW	Depth to Water Detail	23.36	ft
GN-GSA-MW-14S	ORP	Oxidation Reduction Potention	150.06	mv
GN-GSA-MW-14S	PH	pH	6.75	SU
GN-GSA-MW-14S	TEMP	Temperature	20.65	C
GN-GSA-MW-14S	TURB	Turbidity	2.56	NTU
GN-GSA-MW-14S	COND	Conductivity	356.91	uS/cm
GN-GSA-MW-14S	DO	DO	1.29	mg/L
GN-GSA-MW-14S	DTW	Depth to Water Detail	23.36	ft
GN-GSA-MW-14S	ORP	Oxidation Reduction Potention	144.85	mv
GN-GSA-MW-14S	PH	pH	6.8	SU
GN-GSA-MW-14S	TEMP	Temperature	20.68	C
GN-GSA-MW-14S	TURB	Turbidity	2.21	NTU
GN-GSA-MW-14S	COND	Conductivity	362.14	uS/cm
GN-GSA-MW-14S	DO	DO	1.1	mg/L
GN-GSA-MW-14S	DTW	Depth to Water Detail	23.36	ft
GN-GSA-MW-14S	ORP	Oxidation Reduction Potention	115.58	mv
GN-GSA-MW-14S	PH	pH	6.88	SU
GN-GSA-MW-14S	TEMP	Temperature	20.79	C
GN-GSA-MW-14S	TURB	Turbidity	1.96	NTU
GN-GSA-MW-14S	COND	Conductivity	368.6	uS/cm
GN-GSA-MW-14S	DO	DO	0.99	mg/L
GN-GSA-MW-14S	DTW	Depth to Water Detail	23.36	ft
GN-GSA-MW-14S	ORP	Oxidation Reduction Potention	25.16	mv
GN-GSA-MW-14S	PH	pH	6.93	SU
GN-GSA-MW-14S	TEMP	Temperature	20.65	C
GN-GSA-MW-14S	TURB	Turbidity	1.98	NTU
GN-GSA-MW-14S	COND	Conductivity	367.82	uS/cm
GN-GSA-MW-14S	DO	DO	0.95	mg/L
GN-GSA-MW-14S	DTW	Depth to Water Detail	23.36	ft
GN-GSA-MW-14S	ORP	Oxidation Reduction Potention	-1.73	mv
GN-GSA-MW-14S	PH	pH	6.96	SU
GN-GSA-MW-14S	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-14S	TEMP	Temperature	20.64	C
GN-GSA-MW-14S	TURB	Turbidity	1.81	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-15	COND	Conductivity	113.17	uS/cm
GN-GSA-MW-15	DO	DO	2.57	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	22.02	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	176.24	mv
GN-GSA-MW-15	PH	pH	5.57	SU
GN-GSA-MW-15	TEMP	Temperature	22.53	C
GN-GSA-MW-15	TURB	Turbidity	21.7	NTU
GN-GSA-MW-15	COND	Conductivity	110.16	uS/cm
GN-GSA-MW-15	DO	DO	2.52	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	22.5	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	188.16	mv
GN-GSA-MW-15	PH	pH	5.56	SU
GN-GSA-MW-15	TEMP	Temperature	22.58	C
GN-GSA-MW-15	TURB	Turbidity	12.49	NTU
GN-GSA-MW-15	COND	Conductivity	110.07	uS/cm
GN-GSA-MW-15	DO	DO	2.44	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	22.76	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	196.01	mv
GN-GSA-MW-15	PH	pH	5.54	SU
GN-GSA-MW-15	TEMP	Temperature	22.39	C
GN-GSA-MW-15	TURB	Turbidity	7.29	NTU
GN-GSA-MW-15	COND	Conductivity	112.1	uS/cm
GN-GSA-MW-15	DO	DO	2.29	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	22.95	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	201.47	mv
GN-GSA-MW-15	PH	pH	5.52	SU
GN-GSA-MW-15	TEMP	Temperature	22.4	C
GN-GSA-MW-15	TURB	Turbidity	7.64	NTU
GN-GSA-MW-15	COND	Conductivity	113.79	uS/cm
GN-GSA-MW-15	DO	DO	2.22	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	23.1	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	206.67	mv
GN-GSA-MW-15	PH	pH	5.5	SU
GN-GSA-MW-15	TEMP	Temperature	22.14	C
GN-GSA-MW-15	TURB	Turbidity	9.12	NTU
GN-GSA-MW-15	COND	Conductivity	116.9	uS/cm
GN-GSA-MW-15	DO	DO	2.25	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	23.24	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	209.24	mv
GN-GSA-MW-15	PH	pH	5.48	SU
GN-GSA-MW-15	TEMP	Temperature	21.84	C
GN-GSA-MW-15	TURB	Turbidity	8.64	NTU
GN-GSA-MW-15	COND	Conductivity	115.99	uS/cm
GN-GSA-MW-15	DO	DO	2.31	mg/L

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-15	DTW	Depth to Water Detail	23.34	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	214.17	mv
GN-GSA-MW-15	PH	pH	5.45	SU
GN-GSA-MW-15	TEMP	Temperature	21.93	C
GN-GSA-MW-15	TURB	Turbidity	10.12	NTU
GN-GSA-MW-15	COND	Conductivity	115.55	uS/cm
GN-GSA-MW-15	DO	DO	2.37	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	23.42	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	220.12	mv
GN-GSA-MW-15	PH	pH	5.43	SU
GN-GSA-MW-15	TEMP	Temperature	21.77	C
GN-GSA-MW-15	TURB	Turbidity	10.36	NTU
GN-GSA-MW-15	COND	Conductivity	114.72	uS/cm
GN-GSA-MW-15	DO	DO	2.44	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	23.47	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	226.07	mv
GN-GSA-MW-15	PH	pH	5.4	SU
GN-GSA-MW-15	TEMP	Temperature	22.21	C
GN-GSA-MW-15	TURB	Turbidity	12.2	NTU
GN-GSA-MW-15	COND	Conductivity	114.74	uS/cm
GN-GSA-MW-15	DO	DO	2.5	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	23.51	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	230.63	mv
GN-GSA-MW-15	PH	pH	5.4	SU
GN-GSA-MW-15	TEMP	Temperature	22.22	C
GN-GSA-MW-15	TURB	Turbidity	8.46	NTU
GN-GSA-MW-15	COND	Conductivity	116.22	uS/cm
GN-GSA-MW-15	DO	DO	2.57	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	23.54	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	231.47	mv
GN-GSA-MW-15	PH	pH	5.38	SU
GN-GSA-MW-15	TEMP	Temperature	21.93	C
GN-GSA-MW-15	TURB	Turbidity	6.52	NTU
GN-GSA-MW-15	COND	Conductivity	114.79	uS/cm
GN-GSA-MW-15	DO	DO	2.61	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	23.56	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	234.95	mv
GN-GSA-MW-15	PH	pH	5.37	SU
GN-GSA-MW-15	TEMP	Temperature	21.83	C
GN-GSA-MW-15	TURB	Turbidity	6.36	NTU
GN-GSA-MW-15	COND	Conductivity	114.27	uS/cm
GN-GSA-MW-15	DO	DO	2.67	mg/L
GN-GSA-MW-15	DTW	Depth to Water Detail	23.58	ft
GN-GSA-MW-15	ORP	Oxidation Reduction Potention	230.94	mv



**Field Parameters Summary  
Plant Gaston Gypsum Pond**

<b>WELL ID</b>	<b>PARAMETER</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GN-GSA-MW-15	PH	pH	5.37	SU
GN-GSA-MW-15	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-15	TEMP	Temperature	21.72	C
GN-GSA-MW-15	TURB	Turbidity	6.48	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-5	COND	Conductivity	572.33	uS/cm
GN-GSA-MW-5	DO	DO	0.86	mg/L
GN-GSA-MW-5	DTW	Depth to Water Detail	31.54	ft
GN-GSA-MW-5	ORP	Oxidation Reduction Potention	-39.99	mv
GN-GSA-MW-5	PH	pH	6.44	SU
GN-GSA-MW-5	TEMP	Temperature	19.54	C
GN-GSA-MW-5	TURB	Turbidity	0.89	NTU
GN-GSA-MW-5	COND	Conductivity	589.6	uS/cm
GN-GSA-MW-5	DO	DO	0.78	mg/L
GN-GSA-MW-5	DTW	Depth to Water Detail	31.54	ft
GN-GSA-MW-5	ORP	Oxidation Reduction Potention	-23.14	mv
GN-GSA-MW-5	PH	pH	6.34	SU
GN-GSA-MW-5	TEMP	Temperature	19.65	C
GN-GSA-MW-5	TURB	Turbidity	1.33	NTU
GN-GSA-MW-5	COND	Conductivity	599.63	uS/cm
GN-GSA-MW-5	DO	DO	0.75	mg/L
GN-GSA-MW-5	DTW	Depth to Water Detail	31.54	ft
GN-GSA-MW-5	ORP	Oxidation Reduction Potention	-13.14	mv
GN-GSA-MW-5	PH	pH	6.27	SU
GN-GSA-MW-5	TEMP	Temperature	19.61	C
GN-GSA-MW-5	TURB	Turbidity	1.36	NTU
GN-GSA-MW-5	COND	Conductivity	605.27	uS/cm
GN-GSA-MW-5	DO	DO	0.76	mg/L
GN-GSA-MW-5	DTW	Depth to Water Detail	31.54	ft
GN-GSA-MW-5	ORP	Oxidation Reduction Potention	-6.95	mv
GN-GSA-MW-5	PH	pH	6.28	SU
GN-GSA-MW-5	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-5	TEMP	Temperature	19.62	C
GN-GSA-MW-5	TURB	Turbidity	0.65	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-6	COND	Conductivity	27.79	uS/cm
GN-GSA-MW-6	DO	DO	0.74	mg/L
GN-GSA-MW-6	DTW	Depth to Water Detail	30.69	ft
GN-GSA-MW-6	ORP	Oxidation Reduction Potention	212.41	mv
GN-GSA-MW-6	PH	pH	4.49	SU
GN-GSA-MW-6	TEMP	Temperature	20.87	C
GN-GSA-MW-6	TURB	Turbidity	5.19	NTU
GN-GSA-MW-6	COND	Conductivity	27.67	uS/cm
GN-GSA-MW-6	DO	DO	0.49	mg/L
GN-GSA-MW-6	DTW	Depth to Water Detail	30.76	ft
GN-GSA-MW-6	ORP	Oxidation Reduction Potention	226.85	mv
GN-GSA-MW-6	PH	pH	4.47	SU
GN-GSA-MW-6	TEMP	Temperature	20.97	C
GN-GSA-MW-6	TURB	Turbidity	2.05	NTU
GN-GSA-MW-6	COND	Conductivity	27.39	uS/cm
GN-GSA-MW-6	DO	DO	0.41	mg/L
GN-GSA-MW-6	DTW	Depth to Water Detail	30.79	ft
GN-GSA-MW-6	ORP	Oxidation Reduction Potention	240.78	mv
GN-GSA-MW-6	PH	pH	4.32	SU
GN-GSA-MW-6	TEMP	Temperature	20.91	C
GN-GSA-MW-6	TURB	Turbidity	1.35	NTU
GN-GSA-MW-6	COND	Conductivity	27.54	uS/cm
GN-GSA-MW-6	DO	DO	0.66	mg/L
GN-GSA-MW-6	DTW	Depth to Water Detail	30.79	ft
GN-GSA-MW-6	ORP	Oxidation Reduction Potention	233.41	mv
GN-GSA-MW-6	PH	pH	4.5	SU
GN-GSA-MW-6	TEMP	Temperature	20.86	C
GN-GSA-MW-6	TURB	Turbidity	1.2	NTU
GN-GSA-MW-6	COND	Conductivity	27.49	uS/cm
GN-GSA-MW-6	DO	DO	0.6	mg/L
GN-GSA-MW-6	DTW	Depth to Water Detail	30.79	ft
GN-GSA-MW-6	ORP	Oxidation Reduction Potention	231	mv
GN-GSA-MW-6	PH	pH	4.56	SU
GN-GSA-MW-6	TEMP	Temperature	21.01	C
GN-GSA-MW-6	TURB	Turbidity	1.1	NTU
GN-GSA-MW-6	COND	Conductivity	27.45	uS/cm
GN-GSA-MW-6	DO	DO	0.65	mg/L
GN-GSA-MW-6	DTW	Depth to Water Detail	30.79	ft
GN-GSA-MW-6	ORP	Oxidation Reduction Potention	231.41	mv
GN-GSA-MW-6	PH	pH	4.58	SU
GN-GSA-MW-6	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-6	TEMP	Temperature	20.95	C
GN-GSA-MW-6	TURB	Turbidity	1.29	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-7	COND	Conductivity	412.97	uS/cm
GN-GSA-MW-7	DO	DO	3.19	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	29.36	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	136.05	mv
GN-GSA-MW-7	PH	pH	6.7	SU
GN-GSA-MW-7	TEMP	Temperature	26.31	C
GN-GSA-MW-7	TURB	Turbidity	2.59	NTU
GN-GSA-MW-7	COND	Conductivity	412.86	uS/cm
GN-GSA-MW-7	DO	DO	2.76	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	29.5	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	140.99	mv
GN-GSA-MW-7	PH	pH	6.72	SU
GN-GSA-MW-7	TEMP	Temperature	26.33	C
GN-GSA-MW-7	TURB	Turbidity	2.07	NTU
GN-GSA-MW-7	COND	Conductivity	416.2	uS/cm
GN-GSA-MW-7	DO	DO	2.39	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	29.64	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	140.19	mv
GN-GSA-MW-7	PH	pH	6.74	SU
GN-GSA-MW-7	TEMP	Temperature	27	C
GN-GSA-MW-7	TURB	Turbidity	1.44	NTU
GN-GSA-MW-7	COND	Conductivity	416.69	uS/cm
GN-GSA-MW-7	DO	DO	2.18	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	29.71	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	140.22	mv
GN-GSA-MW-7	PH	pH	6.75	SU
GN-GSA-MW-7	TEMP	Temperature	27.23	C
GN-GSA-MW-7	TURB	Turbidity	1.1	NTU
GN-GSA-MW-7	COND	Conductivity	415.07	uS/cm
GN-GSA-MW-7	DO	DO	2.05	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	29.76	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	135.6	mv
GN-GSA-MW-7	PH	pH	6.76	SU
GN-GSA-MW-7	TEMP	Temperature	27.06	C
GN-GSA-MW-7	TURB	Turbidity	1.05	NTU
GN-GSA-MW-7	COND	Conductivity	413.18	uS/cm
GN-GSA-MW-7	DO	DO	1.93	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	29.86	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	137.29	mv
GN-GSA-MW-7	PH	pH	6.75	SU
GN-GSA-MW-7	TEMP	Temperature	26.54	C
GN-GSA-MW-7	TURB	Turbidity	1.01	NTU
GN-GSA-MW-7	COND	Conductivity	410.57	uS/cm
GN-GSA-MW-7	DO	DO	1.81	mg/L

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-7	DTW	Depth to Water Detail	29.94	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	135.02	mv
GN-GSA-MW-7	PH	pH	6.74	SU
GN-GSA-MW-7	TEMP	Temperature	26.46	C
GN-GSA-MW-7	TURB	Turbidity	1.29	NTU
GN-GSA-MW-7	COND	Conductivity	408.34	uS/cm
GN-GSA-MW-7	DO	DO	1.7	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	30.08	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	132.83	mv
GN-GSA-MW-7	PH	pH	6.72	SU
GN-GSA-MW-7	TEMP	Temperature	25.93	C
GN-GSA-MW-7	TURB	Turbidity	0.99	NTU
GN-GSA-MW-7	COND	Conductivity	406.15	uS/cm
GN-GSA-MW-7	DO	DO	1.58	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	30.16	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	128.3	mv
GN-GSA-MW-7	PH	pH	6.72	SU
GN-GSA-MW-7	TEMP	Temperature	26.54	C
GN-GSA-MW-7	TURB	Turbidity	1.15	NTU
GN-GSA-MW-7	COND	Conductivity	400.99	uS/cm
GN-GSA-MW-7	DO	DO	1.5	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	30.24	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	125.1	mv
GN-GSA-MW-7	PH	pH	6.7	SU
GN-GSA-MW-7	TEMP	Temperature	26.81	C
GN-GSA-MW-7	TURB	Turbidity	0.89	NTU
GN-GSA-MW-7	COND	Conductivity	399.01	uS/cm
GN-GSA-MW-7	DO	DO	1.45	mg/L
GN-GSA-MW-7	DTW	Depth to Water Detail	30.34	ft
GN-GSA-MW-7	ORP	Oxidation Reduction Potention	118.82	mv
GN-GSA-MW-7	PH	pH	6.7	SU
GN-GSA-MW-7	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-7	TEMP	Temperature	25.91	C
GN-GSA-MW-7	TURB	Turbidity	0.92	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-8	COND	Conductivity	326.04	uS/cm
GN-GSA-MW-8	DO	DO	0.98	mg/L
GN-GSA-MW-8	DTW	Depth to Water Detail	22.38	ft
GN-GSA-MW-8	ORP	Oxidation Reduction Potention	86.02	mv
GN-GSA-MW-8	PH	pH	7.33	SU
GN-GSA-MW-8	TEMP	Temperature	21.99	C
GN-GSA-MW-8	TURB	Turbidity	5.81	NTU
GN-GSA-MW-8	COND	Conductivity	327.4	uS/cm
GN-GSA-MW-8	DO	DO	0.81	mg/L
GN-GSA-MW-8	DTW	Depth to Water Detail	22.49	ft
GN-GSA-MW-8	ORP	Oxidation Reduction Potention	7	mv
GN-GSA-MW-8	PH	pH	7.15	SU
GN-GSA-MW-8	TEMP	Temperature	21.58	C
GN-GSA-MW-8	TURB	Turbidity	2.12	NTU
GN-GSA-MW-8	COND	Conductivity	327.78	uS/cm
GN-GSA-MW-8	DO	DO	0.78	mg/L
GN-GSA-MW-8	DTW	Depth to Water Detail	22.6	ft
GN-GSA-MW-8	ORP	Oxidation Reduction Potention	-29.99	mv
GN-GSA-MW-8	PH	pH	7.03	SU
GN-GSA-MW-8	TEMP	Temperature	21.63	C
GN-GSA-MW-8	TURB	Turbidity	1.22	NTU
GN-GSA-MW-8	COND	Conductivity	326.95	uS/cm
GN-GSA-MW-8	DO	DO	0.79	mg/L
GN-GSA-MW-8	DTW	Depth to Water Detail	22.71	ft
GN-GSA-MW-8	ORP	Oxidation Reduction Potention	-48.95	mv
GN-GSA-MW-8	PH	pH	6.98	SU
GN-GSA-MW-8	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-8	TEMP	Temperature	21.67	C
GN-GSA-MW-8	TURB	Turbidity	1.24	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-9	COND	Conductivity	179.29	uS/cm
GN-GSA-MW-9	DO	DO	0.91	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	25.22	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	148.67	mv
GN-GSA-MW-9	PH	pH	6.19	SU
GN-GSA-MW-9	TEMP	Temperature	20.06	C
GN-GSA-MW-9	TURB	Turbidity	4.34	NTU
GN-GSA-MW-9	COND	Conductivity	185.08	uS/cm
GN-GSA-MW-9	DO	DO	0.95	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	26.23	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	143.54	mv
GN-GSA-MW-9	PH	pH	6.22	SU
GN-GSA-MW-9	TEMP	Temperature	20.06	C
GN-GSA-MW-9	TURB	Turbidity	4.12	NTU
GN-GSA-MW-9	COND	Conductivity	238.19	uS/cm
GN-GSA-MW-9	DO	DO	0.96	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	26.81	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	130.89	mv
GN-GSA-MW-9	PH	pH	6.39	SU
GN-GSA-MW-9	TEMP	Temperature	20.07	C
GN-GSA-MW-9	TURB	Turbidity	1.95	NTU
GN-GSA-MW-9	COND	Conductivity	275.39	uS/cm
GN-GSA-MW-9	DO	DO	0.9	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	27.3	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	117.37	mv
GN-GSA-MW-9	PH	pH	6.56	SU
GN-GSA-MW-9	TEMP	Temperature	20.11	C
GN-GSA-MW-9	TURB	Turbidity	2.66	NTU
GN-GSA-MW-9	COND	Conductivity	296.12	uS/cm
GN-GSA-MW-9	DO	DO	0.72	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	27.31	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	105.67	mv
GN-GSA-MW-9	PH	pH	6.7	SU
GN-GSA-MW-9	TEMP	Temperature	20.19	C
GN-GSA-MW-9	TURB	Turbidity	1.38	NTU
GN-GSA-MW-9	COND	Conductivity	300.25	uS/cm
GN-GSA-MW-9	DO	DO	0.97	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	27.45	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	102	mv
GN-GSA-MW-9	PH	pH	6.73	SU
GN-GSA-MW-9	TEMP	Temperature	20.18	C
GN-GSA-MW-9	TURB	Turbidity	2.05	NTU
GN-GSA-MW-9	COND	Conductivity	302.05	uS/cm
GN-GSA-MW-9	DO	DO	0.89	mg/L

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-9	DTW	Depth to Water Detail	27.57	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	99.42	mv
GN-GSA-MW-9	PH	pH	6.75	SU
GN-GSA-MW-9	TEMP	Temperature	20.15	C
GN-GSA-MW-9	TURB	Turbidity	2.27	NTU
GN-GSA-MW-9	COND	Conductivity	307.48	uS/cm
GN-GSA-MW-9	DO	DO	0.52	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	27.7	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	94.77	mv
GN-GSA-MW-9	PH	pH	6.8	SU
GN-GSA-MW-9	TEMP	Temperature	20.16	C
GN-GSA-MW-9	TURB	Turbidity	1.19	NTU
GN-GSA-MW-9	COND	Conductivity	310.51	uS/cm
GN-GSA-MW-9	DO	DO	0.53	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	27.83	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	91.47	mv
GN-GSA-MW-9	PH	pH	6.83	SU
GN-GSA-MW-9	TEMP	Temperature	20.21	C
GN-GSA-MW-9	TURB	Turbidity	1.25	NTU
GN-GSA-MW-9	COND	Conductivity	310.19	uS/cm
GN-GSA-MW-9	DO	DO	0.49	mg/L
GN-GSA-MW-9	DTW	Depth to Water Detail	27.92	ft
GN-GSA-MW-9	ORP	Oxidation Reduction Potention	89.11	mv
GN-GSA-MW-9	PH	pH	6.84	SU
GN-GSA-MW-9	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-9	TEMP	Temperature	20.22	C
GN-GSA-MW-9	TURB	Turbidity	1.3	NTU



**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-10	COND	Conductivity	479.11	uS/cm
GN-GSA-MW-10	DO	DO	0.3	mg/L
GN-GSA-MW-10	DTW	Depth to Water Detail	23.06	ft
GN-GSA-MW-10	ORP	Oxidation Reduction Potention	77.41	mv
GN-GSA-MW-10	PH	pH	6.97	SU
GN-GSA-MW-10	TEMP	Temperature	21.11	C
GN-GSA-MW-10	TURB	Turbidity	0.4	NTU
GN-GSA-MW-10	COND	Conductivity	479.3	uS/cm
GN-GSA-MW-10	DO	DO	0.18	mg/L
GN-GSA-MW-10	DTW	Depth to Water Detail	23.16	ft
GN-GSA-MW-10	ORP	Oxidation Reduction Potention	74.38	mv
GN-GSA-MW-10	PH	pH	6.94	SU
GN-GSA-MW-10	TEMP	Temperature	21.08	C
GN-GSA-MW-10	TURB	Turbidity	0.61	NTU
GN-GSA-MW-10	COND	Conductivity	478.58	uS/cm
GN-GSA-MW-10	DO	DO	0.15	mg/L
GN-GSA-MW-10	DTW	Depth to Water Detail	23.23	ft
GN-GSA-MW-10	ORP	Oxidation Reduction Potention	71.36	mv
GN-GSA-MW-10	PH	pH	6.96	SU
GN-GSA-MW-10	TEMP	Temperature	20.98	C
GN-GSA-MW-10	TURB	Turbidity	0.55	NTU
GN-GSA-MW-10	COND	Conductivity	478.07	uS/cm
GN-GSA-MW-10	DO	DO	0.13	mg/L
GN-GSA-MW-10	DTW	Depth to Water Detail	23.23	ft
GN-GSA-MW-10	ORP	Oxidation Reduction Potention	69.46	mv
GN-GSA-MW-10	PH	pH	6.97	SU
GN-GSA-MW-10	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-10	TEMP	Temperature	21	C
GN-GSA-MW-10	TURB	Turbidity	0.6	NTU

**Field Parameters Summary  
Plant Gaston Gypsum Pond**

WELL ID	PARAMETER	DESCRIPTION	VALUE	UNIT
GN-GSA-MW-11	COND	Conductivity	132.26	uS/cm
GN-GSA-MW-11	DO	DO	0.79	mg/L
GN-GSA-MW-11	DTW	Depth to Water Detail	22.31	ft
GN-GSA-MW-11	ORP	Oxidation Reduction Potention	160.23	mv
GN-GSA-MW-11	PH	pH	5.76	SU
GN-GSA-MW-11	TEMP	Temperature	21.53	C
GN-GSA-MW-11	TURB	Turbidity	0.49	NTU
GN-GSA-MW-11	COND	Conductivity	129.43	uS/cm
GN-GSA-MW-11	DO	DO	0.59	mg/L
GN-GSA-MW-11	DTW	Depth to Water Detail	22.39	ft
GN-GSA-MW-11	ORP	Oxidation Reduction Potention	175.05	mv
GN-GSA-MW-11	PH	pH	5.74	SU
GN-GSA-MW-11	TEMP	Temperature	21.59	C
GN-GSA-MW-11	TURB	Turbidity	0.54	NTU
GN-GSA-MW-11	COND	Conductivity	127.74	uS/cm
GN-GSA-MW-11	DO	DO	0.49	mg/L
GN-GSA-MW-11	DTW	Depth to Water Detail	22.39	ft
GN-GSA-MW-11	ORP	Oxidation Reduction Potention	187.03	mv
GN-GSA-MW-11	PH	pH	5.73	SU
GN-GSA-MW-11	TEMP	Temperature	21.6	C
GN-GSA-MW-11	TURB	Turbidity	0.4	NTU
GN-GSA-MW-11	COND	Conductivity	123.98	uS/cm
GN-GSA-MW-11	DO	DO	0.5	mg/L
GN-GSA-MW-11	DTW	Depth to Water Detail	22.39	ft
GN-GSA-MW-11	ORP	Oxidation Reduction Potention	206.21	mv
GN-GSA-MW-11	PH	pH	5.6	SU
GN-GSA-MW-11	SULFIDE	Sulfide	0	mg/L
GN-GSA-MW-11	TEMP	Temperature	21.58	C
GN-GSA-MW-11	TURB	Turbidity	0.35	NTU

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

# *Analytical Report*



**Sample Group :** WMWGASG\_1381

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

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

**Attention :** Dustin Brooks & Greg Dyer

**Released By :** Renee Jernigan  
(205) 664-6247  
rgarner@southernco.com

September 20, 2022


Dear Dustin Brooks,


Enclosed are the analytical results for sample(s) received by the laboratory on August 18, 2022. 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, 2023

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

Sincerely,

Quality Control: **Renee Jernigan**  Digitally signed by Renee Jernigan  
Date: 2022.09.20 14:18:16 -05'00'

Supervision: **T Durant Maske**  Digitally signed by T Durant Maske  
DN: cn=T Durant Maske, gn=T Durant Maske, c=US  
United States, +US United States  
e=tdurmaske@alouthermco.com  
Reason: I am the author of this document  
Location:  
Date: 2022-09-23 07:43:05:00



### 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.



Total Metals ICP

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	734596	WMWGASG_1381
BC15552	734596	WMWGASG_1381
BC15553	734596	WMWGASG_1381
BC15554	734596	WMWGASG_1381
BC15555	734596	WMWGASG_1381
BC15556	734596	WMWGASG_1381
BC15557	734596	WMWGASG_1381
BC15558	734596	WMWGASG_1381
BC15559	734596	WMWGASG_1381
BC15560	734596	WMWGASG_1381
BC15561	734597	WMWGASG_1381
BC15562	734597	WMWGASG_1381
BC15563	734597	WMWGASG_1381
BC15564	734597	WMWGASG_1381
BC15565	734597	WMWGASG_1381
BC15566	734597	WMWGASG_1381
BC15567	734597	WMWGASG_1381
BC15654	734597	WMWGASG_1381
BC15655	734597	WMWGASG_1381

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 all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
7. The following 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>
BC15551	Calcium	10.15
BC15552	Calcium	10.15
BC15553	Calcium	10.15
BC15555	Calcium	10.15
BC15556	Calcium	10.15
BC15558	Calcium, Iron	10.15
BC15559	Calcium, Iron	10.15
BC15561	Calcium	10.15
BC15562	Calcium	10.15
BC15564	Calcium	10.15
BC15565	Calcium	10.15
BC15654	Calcium	10.15
BC15655	Calcium	10.15

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

Dissolved Metals ICP

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	734564	WMWGASG_1381
BC15552	734564	WMWGASG_1381
BC15553	734564	WMWGASG_1381
BC15554	734564	WMWGASG_1381
BC15555	734564	WMWGASG_1381
BC15556	734564	WMWGASG_1381
BC15558	734564	WMWGASG_1381
BC15559	734564	WMWGASG_1381
BC15560	734564	WMWGASG_1381
BC15561	734564	WMWGASG_1381
BC15562	734565	WMWGASG_1381
BC15564	734565	WMWGASG_1381
BC15565	734565	WMWGASG_1381
BC15566	734565	WMWGASG_1381
BC15654	734565	WMWGASG_1381
BC15655	734565	WMWGASG_1381

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

#### General Quality Control Procedures:

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



- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
    - BC15561 and BC15655 Calcium MS/MSD spike levels were less than 30% of the sample concentrations.
  - A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.
7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC15551	Calcium	10.15
BC15552	Calcium	10.15
BC15553	Calcium	10.15
BC15555	Calcium	10.15
BC15556	Calcium	10.15
BC15558	Calcium, Iron	10.15
BC15559	Calcium	10.15
BC15561	Calcium	10.15
BC15562	Calcium	10.15
BC15564	Calcium	10.15
BC15565	Calcium	10.15
BC15654	Calcium	10.15
BC15655	Calcium	10.15

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

Total Metals ICPMS

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	735370	WMWGASG_1381
BC15552	735370	WMWGASG_1381
BC15553	735370	WMWGASG_1381
BC15554	735370	WMWGASG_1381
BC15555	735370	WMWGASG_1381
BC15556	735370	WMWGASG_1381
BC15557	735370	WMWGASG_1381
BC15558	735370	WMWGASG_1381
BC15559	735370	WMWGASG_1381
BC15560	735370	WMWGASG_1381
BC15561	735371	WMWGASG_1381
BC15562	735371	WMWGASG_1381
BC15563	735371	WMWGASG_1381
BC15564	735371	WMWGASG_1381
BC15565	735371	WMWGASG_1381
BC15566	735371	WMWGASG_1381
BC15567	735371	WMWGASG_1381
BC15654	735371	WMWGASG_1381
BC15655	735371	WMWGASG_1381

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

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.

- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

#### Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BC15655 Barium MS/MSD spike levels were less than 30% of the sample concentrations.
  - A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.
7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC15655	Barium	5.075

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

Dissolved Metals ICPMS

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	735312	WMWGASG_1381
BC15552	735312	WMWGASG_1381
BC15553	735312	WMWGASG_1381
BC15554	735312	WMWGASG_1381
BC15555	735312	WMWGASG_1381
BC15556	735312	WMWGASG_1381
BC15558	735312	WMWGASG_1381
BC15559	735312	WMWGASG_1381
BC15560	735312	WMWGASG_1381
BC15561	735312	WMWGASG_1381
BC15562	735313	WMWGASG_1381
BC15564	735313	WMWGASG_1381
BC15565	735313	WMWGASG_1381
BC15566	735313	WMWGASG_1381
BC15654	735313	WMWGASG_1381
BC15655	735313	WMWGASG_1381

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

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.

- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

#### Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met except for the following:
    - BC15655 Barium MS/MSD spike levels were less than 30% of the sample concentrations.
  - A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.
7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC15655	Barium	5.075

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

Mercury

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	734016	WMWGASG_1381
BC15552	734016	WMWGASG_1381
BC15553	734016	WMWGASG_1381
BC15554	734016	WMWGASG_1381
BC15555	734016	WMWGASG_1381
BC15556	734016	WMWGASG_1381
BC15557	734016	WMWGASG_1381
BC15558	734016	WMWGASG_1381
BC15559	734016	WMWGASG_1381
BC15560	734016	WMWGASG_1381
BC15561	734017	WMWGASG_1381
BC15562	734017	WMWGASG_1381
BC15563	734017	WMWGASG_1381
BC15564	734017	WMWGASG_1381
BC15565	734017	WMWGASG_1381
BC15566	734017	WMWGASG_1381
BC15567	734017	WMWGASG_1381
BC15654	734017	WMWGASG_1381
BC15655	734017	WMWGASG_1381

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 analytical batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.
7. All samples were analyzed without a dilution factor.

Total Dissolved Solids

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	734008	WMWGASG_1381
BC15552	734008	WMWGASG_1381
BC15553	734008	WMWGASG_1381
BC15554	734008	WMWGASG_1381
BC15555	734008	WMWGASG_1381
BC15556	734008	WMWGASG_1381
BC15557	734008	WMWGASG_1381
BC15558	734009	WMWGASG_1381
BC15559	734009	WMWGASG_1381
BC15560	734009	WMWGASG_1381
BC15561	734009	WMWGASG_1381
BC15562	734009	WMWGASG_1381
BC15563	734009	WMWGASG_1381
BC15564	734009	WMWGASG_1381
BC15565	734009	WMWGASG_1381
BC15566	734009	WMWGASG_1381
BC15567	734009	WMWGASG_1381
BC15654	734201	WMWGASG_1381
BC15655	734201	WMWGASG_1381

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was  $\leq 10\%$ .
- 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:
  - BC15557
  - BC15560
  - BC15563
  - BC15567

Anions

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	734295,734298,734179	WMWGASG_1381
BC15552	734295,734298,734179	WMWGASG_1381
BC15553	734295,734298,734179	WMWGASG_1381
BC15554	734295,734298,734179	WMWGASG_1381
BC15555	734295,734298,734179	WMWGASG_1381
BC15556	734295,734298,734179	WMWGASG_1381
BC15557	734295,734298,734179	WMWGASG_1381
BC15558	734295,734298,734179	WMWGASG_1381
BC15559	734295,734298,734179	WMWGASG_1381
BC15560	734296,734299,734179	WMWGASG_1381
BC15561	734296,734299,734180	WMWGASG_1381
BC15562	734296,734299,734180	WMWGASG_1381
BC15563	734296,734299,734180	WMWGASG_1381
BC15564	734296,734299,734180	WMWGASG_1381
BC15565	734296,734299,734180	WMWGASG_1381
BC15566	734296,734299,734180	WMWGASG_1381
BC15567	734296,734299,734180	WMWGASG_1381
BC15654	734296,734299,734180	WMWGASG_1381
BC15655	734296,734299,734180	WMWGASG_1381

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) was analyzed, and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.

- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below 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 and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.
8. 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>
BC15558	Sulfate	8
BC15559	Sulfate	8

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

Alkalinity

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	734988; 734989	WMWGASG_1381
BC15552	734988; 734989	WMWGASG_1381
BC15553	734988; 734989	WMWGASG_1381
BC15554	734988; 734989	WMWGASG_1381
BC15555	734988; 734989	WMWGASG_1381
BC15556	734988; 734989	WMWGASG_1381
BC15558	734988; 734989	WMWGASG_1381
BC15559	734988; 734989	WMWGASG_1381
BC15560	734988; 734989	WMWGASG_1381
BC15561	734988; 734989	WMWGASG_1381
BC15562	734988; 734989	WMWGASG_1381
BC15564	735092; 735093	WMWGASG_1381
BC15565	735092; 735093	WMWGASG_1381
BC15566	735092; 735093	WMWGASG_1381
BC15654	735092; 735093	WMWGASG_1381
BC15655	735092; 735093	WMWGASG_1381

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

Nitrate-Nitrite

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	734241	WMWGASG_1381
BC15552	734241	WMWGASG_1381
BC15553	734241	WMWGASG_1381
BC15554	734241	WMWGASG_1381
BC15555	734241	WMWGASG_1381
BC15556	734241	WMWGASG_1381
BC15557	734241	WMWGASG_1381
BC15558	734241	WMWGASG_1381
BC15559	734241	WMWGASG_1381
BC15560	734241	WMWGASG_1381
BC15561	734242	WMWGASG_1381
BC15562	734242	WMWGASG_1381
BC15563	734242	WMWGASG_1381
BC15564	734242	WMWGASG_1381
BC15565	734242	WMWGASG_1381
BC15566	734242	WMWGASG_1381
BC15567	734242	WMWGASG_1381
BC15654	734242	WMWGASG_1381
BC15655	734242	WMWGASG_1381

4. All of the above samples were prepared and analyzed for NO<sub>x</sub> by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.

Revision 5

- All continued calibration blanks (CCB) were below the limit of detection.

### EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.
- 7. All samples were analyzed without a dilution factor.
- 8. The raw data results are shown with dilution factors included.

Total Organic Carbon

Gaston Gypsum

WMWGASG\_1381

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC15551	734612	WMWGASG_1381
BC15552	734612	WMWGASG_1381
BC15553	734612	WMWGASG_1381
BC15554	734612	WMWGASG_1381
BC15555	734612	WMWGASG_1381
BC15556	734612	WMWGASG_1381
BC15557	734612	WMWGASG_1381
BC15558	734612	WMWGASG_1381
BC15559	734612	WMWGASG_1381
BC15560	734612	WMWGASG_1381
BC15561	734613	WMWGASG_1381
BC15562	734613	WMWGASG_1381
BC15563	734613	WMWGASG_1381
BC15564	734613	WMWGASG_1381
BC15565	734613	WMWGASG_1381
BC15566	734613	WMWGASG_1381
BC15567	734613	WMWGASG_1381
BC15654	734613	WMWGASG_1381
BC15655	734613	WMWGASG_1381

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
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 criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

### Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met, except for the following:
    - BC15560 matrix spike recovery is outside of the specification limit.
  - A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met, except for the following:
    - BC15560 matrix spike and matrix spike duplicate precision is outside of the specification limit.
7. All samples were analyzed without a dilution factor.
  8. The raw data results are shown with dilution factors included.



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 08:18  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:06

**Laboratory ID Number:** BC15551

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 12:41		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 14:07		10.15	96.3	mg/L	0.70035	4.06		
* Iron, Total	8/23/22 13:49	8/24/22 12:41		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	8/23/22 13:49	8/24/22 12:41		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 12:41		1.015	20.7	mg/L	0.021315	0.406		
Silica, Total (calc.)	8/23/22 13:49	8/24/22 12:41		1	11.6	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 12:41		1.015	5.43	mg/L	0.02030	0.25375		
* Sodium, Total	8/23/22 13:49	8/24/22 12:41		1.015	2.30	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	8/23/22 12:15	8/25/22 13:35		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	8/23/22 12:15	8/25/22 14:51		10.15	92.0	mg/L	0.70035	4.06		
* Iron, Dissolved	8/23/22 12:15	8/25/22 13:35		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 13:35		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 13:35		1.015	20.4	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 13:35		1	11.5	mg/L				
Silicon, Dissolved	8/23/22 12:15	8/25/22 13:35		1.015	5.39	mg/L	0.02030	0.25375		
* Sodium, Dissolved	8/23/22 12:15	8/25/22 13:35		1.015	2.36	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 19:40		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 15:21		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	8/23/22 13:49	8/23/22 19:40		1.015	0.0000824	mg/L	0.000081	0.000203	J	
* Barium, Total	8/23/22 13:49	8/23/22 19:40		1.015	0.0314	mg/L	0.000508	0.001015		
* Beryllium, Total	8/23/22 13:49	8/23/22 19:40		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 19:40		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	8/23/22 13:49	8/23/22 19:40		1.015	0.000633	mg/L	0.000203	0.001015	J	
* Cobalt, Total	8/23/22 13:49	8/23/22 19:40		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	8/23/22 13:49	8/23/22 19:40		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 19:40		1.015	0.000594	mg/L	0.000152	0.001015	J	
* Molybdenum, Total	8/23/22 13:49	8/23/22 19:40		1.015	0.000370	mg/L	0.000102	0.000203		
* Potassium, Total	8/23/22 13:49	8/23/22 19:40		1.015	0.623	mg/L	0.169505	0.5075		

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 08:18  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:06

**Laboratory ID Number:** BC15551

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 19:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 19:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	0.0000912	mg/L	0.000081	0.000203	J
* Barium, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	0.0315	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	0.000493	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	0.000498	mg/L	0.000152	0.001015	J
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	0.000371	mg/L	0.000102	0.000203	
* Potassium, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	0.620	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 17:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 20:55		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 11:56	8/23/22 11:56		1	0.421	mg/L as N	0.20	0.3	
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	268	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	280	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	266	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	1.90	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 18:02	8/25/22 18:02		1	2.97	mg/L	1.00	2	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 08:18  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:06

**Laboratory ID Number:** BC15551

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:44	8/19/22 09:44		1	3.66	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:22	8/19/22 11:22		1	0.0865	mg/L	0.06	0.125	J
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:30	8/18/22 15:30		1	8.31	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	8/16/22 08:15	8/16/22 08:15			574.67	uS/cm			FA
pH	8/16/22 08:15	8/16/22 08:15			7.04	SU			FA
Temperature	8/16/22 08:15	8/16/22 08:15			21.34	C			FA
Turbidity	8/16/22 08:15	8/16/22 08:15			1.4	NTU			FA
Sulfide	8/16/22 08:15	8/16/22 08:15			0	mg/L			FA

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

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**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 08:18  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:06

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

**Laboratory ID Number:** BC15551

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 08:18  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:06

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

**Laboratory ID Number:** BC15551

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 08:18  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:06

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

**Laboratory ID Number:** BC15551

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15556	Solids, Dissolved	mg/L	1.00	25.0			170	52.0	40.0 to 60.0			4.82	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 09:35  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 12:44		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/22 13:49	8/24/22 14:10		10.15	107	mg/L	0.70035	4.06	
* Iron, Total	8/23/22 13:49	8/24/22 12:44		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/23/22 13:49	8/24/22 12:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 12:44		1.015	10.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 12:44		1	9.37	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 12:44		1.015	4.38	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 12:44		1.015	3.07	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 13:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/22 12:15	8/25/22 14:54		10.15	108	mg/L	0.70035	4.06	
* Iron, Dissolved	8/23/22 12:15	8/25/22 13:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	8/23/22 12:15	8/25/22 13:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 13:39		1.015	10.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 13:39		1	9.42	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 13:39		1.015	4.40	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 13:39		1.015	3.13	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 19:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 15:24		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	8/23/22 13:49	8/23/22 19:44		1.015	0.000131	mg/L	0.000081	0.000203	J
* Barium, Total	8/23/22 13:49	8/23/22 19:44		1.015	0.0383	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 19:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 19:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 19:44		1.015	0.000444	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/23/22 13:49	8/23/22 19:44		1.015	0.0000885	mg/L	0.000068	0.000203	J
* Lead, Total	8/23/22 13:49	8/23/22 19:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/22 13:49	8/23/22 19:44		1.015	0.00157	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 19:44		1.015	0.000189	mg/L	0.000102	0.000203	J
* Potassium, Total	8/23/22 13:49	8/23/22 19:44		1.015	0.933	mg/L	0.169505	0.5075	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 09:35  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 19:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 19:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	0.000120	mg/L	0.000081	0.000203	J
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	0.0372	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	0.000436	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	0.000146	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	0.923	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 20:59		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 11:58	8/23/22 11:58		1	0.414	mg/L as N	0.20	0.3	
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	249	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	264	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	245	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	4.09	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 18:25	8/25/22 18:25		1	Not Detected	mg/L	1.00	2	U

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 09:35  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:45	8/19/22 09:45		1	3.47	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:23	8/19/22 11:23		1	0.0614	mg/L	0.06	0.125	J
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:31	8/18/22 15:31		1	8.54	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	8/16/22 09:32	8/16/22 09:32			564.90	uS/cm			FA
pH	8/16/22 09:32	8/16/22 09:32			6.92	SU			FA
Temperature	8/16/22 09:32	8/16/22 09:32			20.31	C			FA
Turbidity	8/16/22 09:32	8/16/22 09:32			0.98	NTU			FA
Sulfide	8/16/22 09:32	8/16/22 09:32			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 09:35  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15552

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 09:35  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15552

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 09:35  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15552

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15556	Solids, Dissolved	mg/L	1.00	25.0			170	52.0	40.0 to 60.0			4.82	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 09:35  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15553

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 12:48		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 14:13		10.15	111	mg/L	0.70035	4.06		
* Iron, Total	8/23/22 13:49	8/24/22 12:48		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	8/23/22 13:49	8/24/22 12:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 12:48		1.015	10.5	mg/L	0.021315	0.406		
Silica, Total (calc.)	8/23/22 13:49	8/24/22 12:48		1	9.42	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 12:48		1.015	4.40	mg/L	0.02030	0.25375		
* Sodium, Total	8/23/22 13:49	8/24/22 12:48		1.015	3.03	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	8/23/22 12:15	8/25/22 13:42		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	8/23/22 12:15	8/25/22 14:58		10.15	97.5	mg/L	0.70035	4.06		
* Iron, Dissolved	8/23/22 12:15	8/25/22 13:42		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 13:42		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 13:42		1.015	10.7	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 13:42		1	9.35	mg/L				
Silicon, Dissolved	8/23/22 12:15	8/25/22 13:42		1.015	4.37	mg/L	0.02030	0.25375		
* Sodium, Dissolved	8/23/22 12:15	8/25/22 13:42		1.015	3.11	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 19:48		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 15:28		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	8/23/22 13:49	8/23/22 19:48		1.015	0.000113	mg/L	0.000081	0.000203	J	
* Barium, Total	8/23/22 13:49	8/23/22 19:48		1.015	0.0394	mg/L	0.000508	0.001015		
* Beryllium, Total	8/23/22 13:49	8/23/22 19:48		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 19:48		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	8/23/22 13:49	8/23/22 19:48		1.015	0.000427	mg/L	0.000203	0.001015	J	
* Cobalt, Total	8/23/22 13:49	8/23/22 19:48		1.015	0.0000976	mg/L	0.000068	0.000203	J	
* Lead, Total	8/23/22 13:49	8/23/22 19:48		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 19:48		1.015	0.00150	mg/L	0.000152	0.001015		
* Molybdenum, Total	8/23/22 13:49	8/23/22 19:48		1.015	0.000197	mg/L	0.000102	0.000203	J	
* Potassium, Total	8/23/22 13:49	8/23/22 19:48		1.015	0.943	mg/L	0.169505	0.5075		

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 09:35  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15553

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 19:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 19:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	0.000113	mg/L	0.000081	0.000203	J
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	0.0383	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	0.000430	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	0.000165	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	0.911	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 21:03		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:00	8/23/22 12:00		1	0.415	mg/L as N	0.20	0.3	
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	249	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	260	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	245	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	3.74	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 18:48	8/25/22 18:48		1	Not Detected	mg/L	1.00	2	U

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 09:35  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15553

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:46	8/19/22 09:46		1	3.45	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:24	8/19/22 11:24		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:32	8/18/22 15:32		1	8.37	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	8/16/22 09:32	8/16/22 09:32			564.90	uS/cm			FA
pH	8/16/22 09:32	8/16/22 09:32			6.92	SU			FA
Temperature	8/16/22 09:32	8/16/22 09:32			20.31	C			FA
Turbidity	8/16/22 09:32	8/16/22 09:32			0.98	NTU			FA
Sulfide	8/16/22 09:32	8/16/22 09:32			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 09:35  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15553

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 09:35  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15553

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 09:35  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15553

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15556	Solids, Dissolved	mg/L	1.00	25.0			170	52.0	40.0 to 60.0			4.82	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 13:05  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 12:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/22 13:49	8/24/22 12:51		1.015	4.13	mg/L	0.070035	0.406	
* Iron, Total	8/23/22 13:49	8/24/22 12:51		1.015	0.326	mg/L	0.008120	0.0406	
* Lithium, Total	8/23/22 13:49	8/24/22 12:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 12:51		1.015	0.292	mg/L	0.021315	0.406	J
Silica, Total (calc.)	8/23/22 13:49	8/24/22 12:51		1	9.24	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 12:51		1.015	4.32	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 12:51		1.015	1.02	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 13:45		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/22 12:15	8/25/22 13:45		1.015	4.01	mg/L	0.070035	0.406	
* Iron, Dissolved	8/23/22 12:15	8/25/22 13:45		1.015	0.249	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 13:45		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 13:45		1.015	0.295	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 13:45		1	9.14	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 13:45		1.015	4.27	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 13:45		1.015	1.05	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 19:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 15:31		1.015	0.0391	mg/L	0.006090	0.01015	
* Arsenic, Total	8/23/22 13:49	8/23/22 19:51		1.015	0.000298	mg/L	0.000081	0.000203	
* Barium, Total	8/23/22 13:49	8/23/22 19:51		1.015	0.00740	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 19:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 19:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 19:51		1.015	0.000374	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/23/22 13:49	8/23/22 19:51		1.015	0.000587	mg/L	0.000068	0.000203	
* Lead, Total	8/23/22 13:49	8/23/22 19:51		1.015	0.000115	mg/L	0.000068	0.000203	J
* Manganese, Total	8/23/22 13:49	8/23/22 19:51		1.015	0.0655	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 19:51		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	8/23/22 13:49	8/23/22 19:51		1.015	0.242	mg/L	0.169505	0.5075	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 13:05  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 19:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 19:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	0.000207	mg/L	0.000081	0.000203	
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	0.00715	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	0.000496	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	0.0000689	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	0.0617	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	0.237	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 21:07		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:02	8/23/22 12:02		1	0.228	mg/L as N	0.20	0.3	J
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	4.72	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	27.3	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	4.71	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 19:12	8/25/22 19:12		1	Not Detected	mg/L	1.00	2	U

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 13:05  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:47	8/19/22 09:47		1	2.27	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:26	8/19/22 11:26		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:33	8/18/22 15:33		1	3.73	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	8/16/22 13:02	8/16/22 13:02			114.27	uS/cm			FA
pH	8/16/22 13:02	8/16/22 13:02			5.37	SU			FA
Temperature	8/16/22 13:02	8/16/22 13:02			21.72	C			FA
Turbidity	8/16/22 13:02	8/16/22 13:02			6.48	NTU			FA
Sulfide	8/16/22 13:02	8/16/22 13:02			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 13:05  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15554

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 13:05  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15554

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 13:05  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15554

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15556	Solids, Dissolved	mg/L	1.00	25.0			170	52.0	40.0 to 60.0			4.82	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 14:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:08

**Laboratory ID Number:** BC15555

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 12:54		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 14:16		10.15	50.5	mg/L	0.70035	4.06		
* Iron, Total	8/23/22 13:49	8/24/22 12:54		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	8/23/22 13:49	8/24/22 12:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 12:54		1.015	2.45	mg/L	0.021315	0.406		
Silica, Total (calc.)	8/23/22 13:49	8/24/22 12:54		1	7.51	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 12:54		1.015	3.51	mg/L	0.02030	0.25375		
* Sodium, Total	8/23/22 13:49	8/24/22 12:54		1.015	4.41	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	8/23/22 12:15	8/25/22 13:48		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:01		10.15	52.2	mg/L	0.70035	4.06		
* Iron, Dissolved	8/23/22 12:15	8/25/22 13:48		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 13:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 13:48		1.015	2.49	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 13:48		1	7.43	mg/L				
Silicon, Dissolved	8/23/22 12:15	8/25/22 13:48		1.015	3.47	mg/L	0.02030	0.25375		
* Sodium, Dissolved	8/23/22 12:15	8/25/22 13:48		1.015	4.47	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 19:55		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 15:35		1.015	0.00750	mg/L	0.006090	0.01015	J	
* Arsenic, Total	8/23/22 13:49	8/23/22 19:55		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	8/23/22 13:49	8/23/22 19:55		1.015	0.0250	mg/L	0.000508	0.001015		
* Beryllium, Total	8/23/22 13:49	8/23/22 19:55		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 19:55		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	8/23/22 13:49	8/23/22 19:55		1.015	0.000408	mg/L	0.000203	0.001015	J	
* Cobalt, Total	8/23/22 13:49	8/23/22 19:55		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	8/23/22 13:49	8/23/22 19:55		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 19:55		1.015	0.00375	mg/L	0.000152	0.001015		
* Molybdenum, Total	8/23/22 13:49	8/23/22 19:55		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	8/23/22 13:49	8/23/22 19:55		1.015	7.95	mg/L	0.169505	0.5075		

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 14:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:08

**Laboratory ID Number:** BC15555

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 19:55		1.015	0.000556	mg/L	0.000508	0.001015	J
* Thallium, Total	8/23/22 13:49	8/23/22 19:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	0.0241	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	0.000262	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	0.00128	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	7.98	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 21:11		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:04	8/23/22 12:04		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	143	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	164	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	141	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	1.92	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 19:32	8/25/22 19:32		1	Not Detected	mg/L	1.00	2	U

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 14:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:08

**Laboratory ID Number:** BC15555

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:49	8/19/22 09:49		1	3.08	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:27	8/19/22 11:27		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:35	8/18/22 15:35		1	7.79	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	8/16/22 14:51	8/16/22 14:51			307.36	uS/cm			FA
pH	8/16/22 14:51	8/16/22 14:51			6.25	SU			FA
Temperature	8/16/22 14:51	8/16/22 14:51			21.90	C			FA
Turbidity	8/16/22 14:51	8/16/22 14:51			1.24	NTU			FA
Sulfide	8/16/22 14:51	8/16/22 14:51			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 14:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:08

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

**Laboratory ID Number:** BC15555

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 14:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:08

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

**Laboratory ID Number:** BC15555

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 14:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:08

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

**Laboratory ID Number:** BC15555

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15556	Solids, Dissolved	mg/L	1.00	25.0			170	52.0	40.0 to 60.0			4.82	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 16:03  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15556

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 12:57		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 14:19		10.15	52.1	mg/L	0.70035	4.06		
* Iron, Total	8/23/22 13:49	8/24/22 12:57		1.015	0.0475	mg/L	0.008120	0.0406		
* Lithium, Total	8/23/22 13:49	8/24/22 12:57		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 12:57		1.015	8.81	mg/L	0.021315	0.406		
Silica, Total (calc.)	8/23/22 13:49	8/24/22 12:57		1	10.1	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 12:57		1.015	4.70	mg/L	0.02030	0.25375		
* Sodium, Total	8/23/22 13:49	8/24/22 12:57		1.015	12.9	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	8/23/22 12:15	8/25/22 13:51		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:04		10.15	52.5	mg/L	0.70035	4.06		
* Iron, Dissolved	8/23/22 12:15	8/25/22 13:51		1.015	0.0322	mg/L	0.008120	0.0406	J	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 13:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 13:51		1.015	8.82	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 13:51		1	9.87	mg/L				
Silicon, Dissolved	8/23/22 12:15	8/25/22 13:51		1.015	4.61	mg/L	0.02030	0.25375		
* Sodium, Dissolved	8/23/22 12:15	8/25/22 13:51		1.015	14.1	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 19:59		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 15:38		1.015	0.0207	mg/L	0.006090	0.01015		
* Arsenic, Total	8/23/22 13:49	8/23/22 19:59		1.015	0.000140	mg/L	0.000081	0.000203	J	
* Barium, Total	8/23/22 13:49	8/23/22 19:59		1.015	0.0251	mg/L	0.000508	0.001015		
* Beryllium, Total	8/23/22 13:49	8/23/22 19:59		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 19:59		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	8/23/22 13:49	8/23/22 19:59		1.015	0.000574	mg/L	0.000203	0.001015	J	
* Cobalt, Total	8/23/22 13:49	8/23/22 19:59		1.015	0.000124	mg/L	0.000068	0.000203	J	
* Lead, Total	8/23/22 13:49	8/23/22 19:59		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 19:59		1.015	0.0179	mg/L	0.000152	0.001015		
* Molybdenum, Total	8/23/22 13:49	8/23/22 19:59		1.015	0.000334	mg/L	0.000102	0.000203		
* Potassium, Total	8/23/22 13:49	8/23/22 19:59		1.015	0.841	mg/L	0.169505	0.5075		

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 16:03  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15556

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 19:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 19:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	0.000148	mg/L	0.000081	0.000203	J
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	0.0245	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	0.000493	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	0.000104	mg/L	0.000068	0.000203	J
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	0.0193	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	0.000422	mg/L	0.000102	0.000203	
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	0.842	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 21:15		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:06	8/23/22 12:06		1	0.201	mg/L as N	0.20	0.3	J
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	169	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	162	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	167	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	2.26	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 19:50	8/25/22 19:50		1	1.05	mg/L	1.00	2	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 16:03  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:07

**Laboratory ID Number:** BC15556

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:50	8/19/22 09:50		1	2.54	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:28	8/19/22 11:28		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:36	8/18/22 15:36		1	4.71	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	8/16/22 16:00	8/16/22 16:00			367.82	uS/cm			FA
pH	8/16/22 16:00	8/16/22 16:00			6.96	SU			FA
Temperature	8/16/22 16:00	8/16/22 16:00			20.64	C			FA
Turbidity	8/16/22 16:00	8/16/22 16:00			1.81	NTU			FA
Sulfide	8/16/22 16:00	8/16/22 16:00			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 16:03  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15556

Sample	Analysis	Units	MB				Standard		Rec		Prec	Limit	
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec			Limit
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 16:03  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15556

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 16:03  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:07

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

**Laboratory ID Number:** BC15556

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15556	Solids, Dissolved	mg/L	1.00	25.0			170	52.0	40.0 to 60.0			4.82	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-2

**Location Code:** WMWGASGFB  
**Collected:** 8/17/22 08:50  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:08

**Laboratory ID Number:** BC15557

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 13:00		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 13:00		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	8/23/22 13:49	8/24/22 13:00		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	8/23/22 13:49	8/24/22 13:00		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 13:00		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:00		1	Not Detected	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 13:00		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	8/23/22 13:49	8/24/22 13:00		1.015	Not Detected	mg/L	0.03045	0.406	U	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 15:42		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000152	0.001015	U	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	8/23/22 13:49	8/23/22 20:02		1.015	Not Detected	mg/L	0.000068	0.000203	U	
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>								
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 21:19		1	Not Detected	mg/L	0.0003	0.0005	U	
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>								
* Nitrogen, Nitrate/Nitrite	8/23/22 12:07	8/23/22 12:07		1	Not Detected	mg/L as N	0.20	0.3	U	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>								
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	Not Detected	mg/L		25	U	

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

**Comments:**

# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-2

**Location Code:** WMWGASGFB

**Collected:** 8/17/22 08:50

**Customer ID:**

**Submittal Date:** 8/18/22 09:08

**Laboratory ID Number:** BC15557

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 20:09	8/25/22 20:09		1	Not Detected	mg/L	1.00	2	U
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:51	8/19/22 09:51		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:29	8/19/22 11:29		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:37	8/18/22 15:37		1	Not Detected	mg/L	0.6	2	U

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

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**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 8/17/22 08:50

**Customer ID:**

**Delivery Date:** 8/18/22 09:08

**Description:** Gaston Gypsum Field Blank-2

**Laboratory ID Number:** BC15557

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 8/17/22 08:50

**Customer ID:**

**Delivery Date:** 8/18/22 09:08

**Description:** Gaston Gypsum Field Blank-2

**Laboratory ID Number:** BC15557

Sample	Analysis	Units	MB	MB				Standard	Standard		Rec		Prec	Limit	
				Limit	Spike	MS	MSD		Limit	Rec	Limit	Prec			
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115		106	70.0 to 130		0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7			129	80.0 to 120		20.5	20.0

**Comments:**



## Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 8/17/22 08:50

**Customer ID:**

**Delivery Date:** 8/18/22 09:08

**Description:** Gaston Gypsum Field Blank-2

**Laboratory ID Number:** BC15557

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15556	Solids, Dissolved	mg/L	1.00	25.0			170	52.0	40.0 to 60.0			4.82	10.0

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**Comments:**

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 10:45  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:09

**Laboratory ID Number:** BC15558

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 13:03		1.015	0.0379	mg/L	0.030000	0.1015	J
* Calcium, Total	8/23/22 13:49	8/24/22 14:22		10.15	94.8	mg/L	0.70035	4.06	
* Iron, Total	8/23/22 13:49	8/24/22 14:22		10.15	5.30	mg/L	0.08120	0.406	
* Lithium, Total	8/23/22 13:49	8/24/22 13:03		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 13:03		1.015	18.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:03		1	10.2	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 13:03		1.015	4.76	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 13:03		1.015	22.1	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 13:54		1.015	0.0430	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:07		10.15	98.3	mg/L	0.70035	4.06	
* Iron, Dissolved	8/23/22 12:15	8/25/22 15:07		10.15	4.85	mg/L	0.08120	0.406	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 13:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 13:54		1.015	19.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 13:54		1	10.1	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 13:54		1.015	4.73	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 13:54		1.015	20.4	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 20:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 15:46		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	8/23/22 13:49	8/23/22 20:06		1.015	0.00134	mg/L	0.000081	0.000203	
* Barium, Total	8/23/22 13:49	8/23/22 20:06		1.015	0.0743	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 20:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 20:06		1.015	0.000271	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/23/22 13:49	8/23/22 20:06		1.015	0.00389	mg/L	0.000068	0.000203	
* Lead, Total	8/23/22 13:49	8/23/22 20:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/22 13:49	8/23/22 20:06		1.015	0.998	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:06		1.015	0.000131	mg/L	0.000102	0.000203	J
* Potassium, Total	8/23/22 13:49	8/23/22 20:06		1.015	0.337	mg/L	0.169505	0.5075	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 10:45  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:09

**Laboratory ID Number:** BC15558

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 20:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 20:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	0.00130	mg/L	0.000081	0.000203	
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	0.0735	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	0.00381	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	0.963	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	0.000143	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	0.302	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 21:23		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:09	8/23/22 12:09		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	172	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	376	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	170	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	1.46	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 20:26	8/25/22 20:26		1	1.28	mg/L	1.00	2	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 10:45  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:09

**Laboratory ID Number:** BC15558

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:52	8/19/22 09:52		1	9.72	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:30	8/19/22 11:30		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:47	8/18/22 15:47		8	142	mg/L	4.8	16	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	8/16/22 10:40	8/16/22 10:40			605.27	uS/cm			FA
pH	8/16/22 10:40	8/16/22 10:40			6.28	SU			FA
Temperature	8/16/22 10:40	8/16/22 10:40			19.62	C			FA
Turbidity	8/16/22 10:40	8/16/22 10:40			0.65	NTU			FA
Sulfide	8/16/22 10:40	8/16/22 10:40			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 10:45  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:09

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

**Laboratory ID Number:** BC15558

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 10:45  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:09

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

**Laboratory ID Number:** BC15558

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 10:45  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:09

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

**Laboratory ID Number:** BC15558

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15565	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 10:45  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15559

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 13:07		1.015	0.0382	mg/L	0.030000	0.1015	J
* Calcium, Total	8/23/22 13:49	8/24/22 14:26		10.15	88.4	mg/L	0.70035	4.06	
* Iron, Total	8/23/22 13:49	8/24/22 14:26		10.15	4.95	mg/L	0.08120	0.406	
* Lithium, Total	8/23/22 13:49	8/24/22 13:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 13:07		1.015	18.8	mg/L	0.021315	0.406	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:07		1	10.3	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 13:07		1.015	4.81	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 13:07		1.015	22.8	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 13:58		1.015	0.0429	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:10		10.15	93.2	mg/L	0.70035	4.06	
* Iron, Dissolved	8/23/22 12:15	8/25/22 13:58		1.015	4.04	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 13:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 13:58		1.015	19.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 13:58		1	10.2	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 13:58		1.015	4.76	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 13:58		1.015	20.0	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 20:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 15:49		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	8/23/22 13:49	8/23/22 20:10		1.015	0.00136	mg/L	0.000081	0.000203	
* Barium, Total	8/23/22 13:49	8/23/22 20:10		1.015	0.0747	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 20:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 20:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/22 13:49	8/23/22 20:10		1.015	0.00390	mg/L	0.000068	0.000203	
* Lead, Total	8/23/22 13:49	8/23/22 20:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/22 13:49	8/23/22 20:10		1.015	0.999	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:10		1.015	0.000135	mg/L	0.000102	0.000203	J
* Potassium, Total	8/23/22 13:49	8/23/22 20:10		1.015	0.319	mg/L	0.169505	0.5075	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 10:45  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15559

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 20:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 20:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	0.00114	mg/L	0.000081	0.000203	
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	0.0728	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	0.00377	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	0.960	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	0.000102	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	0.331	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 21:27		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:11	8/23/22 12:11		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	175	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	388	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	175	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 20:48	8/25/22 20:48		1	1.33	mg/L	1.00	2	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 10:45  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15559

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 09:53	8/19/22 09:53		1	9.52	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:32	8/19/22 11:32		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:48	8/18/22 15:48		8	146	mg/L	4.8	16	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	8/16/22 10:40	8/16/22 10:40			605.27	uS/cm			FA
pH	8/16/22 10:40	8/16/22 10:40			6.28	SU			FA
Temperature	8/16/22 10:40	8/16/22 10:40			19.62	C			FA
Turbidity	8/16/22 10:40	8/16/22 10:40			0.65	NTU			FA
Sulfide	8/16/22 10:40	8/16/22 10:40			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 10:45  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15559

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0	
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0	
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0	
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0	
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0	
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0	
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0	
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0	
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0	
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0	
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0	
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0	
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0	
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0	
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0	
BC15559	Chloride	mg/L	-0.0981	1.00	10.0	19.5	19.6	10.4	9.00 to 11.0	99.8	80.0 to 120	0.512	20.0	
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0	
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0	
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0	
BC15559	Fluoride	mg/L	0.00141	0.125	2.50	2.54	2.54	2.48	2.25 to 2.75	102	80.0 to 120	0.00	20.0	
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0	
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0	

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 10:45  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15559

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 10:45  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15559

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15565	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 11:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15560

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 13:10		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/22 13:49	8/24/22 13:10		1.015	0.516	mg/L	0.070035	0.406	
* Iron, Total	8/23/22 13:49	8/24/22 13:10		1.015	0.0166	mg/L	0.008120	0.0406	J
* Lithium, Total	8/23/22 13:49	8/24/22 13:10		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 13:10		1.015	0.375	mg/L	0.021315	0.406	J
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:10		1	8.86	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 13:10		1.015	4.14	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 13:10		1.015	2.57	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 14:01		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/22 12:15	8/25/22 14:01		1.015	0.568	mg/L	0.070035	0.406	
* Iron, Dissolved	8/23/22 12:15	8/25/22 14:01		1.015	0.0166	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	8/23/22 12:15	8/25/22 14:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 14:01		1.015	0.419	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 14:01		1	8.75	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 14:01		1.015	4.09	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 14:01		1.015	2.62	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 20:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 15:53		1.015	0.0895	mg/L	0.006090	0.01015	
* Arsenic, Total	8/23/22 13:49	8/23/22 20:13		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	8/23/22 13:49	8/23/22 20:13		1.015	0.0178	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 20:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 20:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/22 13:49	8/23/22 20:13		1.015	0.000713	mg/L	0.000068	0.000203	
* Lead, Total	8/23/22 13:49	8/23/22 20:13		1.015	0.000318	mg/L	0.000068	0.000203	
* Manganese, Total	8/23/22 13:49	8/23/22 20:13		1.015	0.00822	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:13		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	8/23/22 13:49	8/23/22 20:13		1.015	0.178	mg/L	0.169505	0.5075	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. The matrix spike recovery for Total Organic Carbon was outside of specification limits. The matrix spike and matrix spike duplicate precision for Total Organic Carbon was outside of the specification limits.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 11:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15560

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 20:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 20:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	0.0255	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	0.0194	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	0.000793	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	0.000406	mg/L	0.000068	0.000203	
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	0.00865	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	8/24/22 16:03	8/24/22 21:31		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:13	8/23/22 12:13		1	0.215	mg/L as N	0.20	0.3	J
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	3.56	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	3.56	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 21:12	8/25/22 21:12		1	Not Detected	mg/L	1.00	2	U

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. The matrix spike recovery for Total Organic Carbon was outside of specification limits. The matrix spike and matrix spike duplicate precision for Total Organic Carbon was outside of the specification limits.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 11:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15560

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:06	8/19/22 10:06		1	3.64	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:44	8/19/22 11:44		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:41	8/18/22 15:41		1	Not Detected	mg/L	0.6	2	U
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	8/16/22 11:53	8/16/22 11:53			27.45	uS/cm			FA
pH	8/16/22 11:53	8/16/22 11:53			4.58	SU			FA
Temperature	8/16/22 11:53	8/16/22 11:53			20.95	C			FA
Turbidity	8/16/22 11:53	8/16/22 11:53			1.29	NTU			FA
Sulfide	8/16/22 11:53	8/16/22 11:53			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. The matrix spike recovery for Total Organic Carbon was outside of specification limits. The matrix spike and matrix spike duplicate precision for Total Organic Carbon was outside of the specification limits.



# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 11:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15560

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15560	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.193	0.194	0.0979	0.0850 to 0.115	104	70.0 to 130	0.517	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15560	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.101	0.101	0.0973	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15560	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.0989	0.0998	0.0997	0.0850 to 0.115	98.9	70.0 to 130	0.906	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15560	Barium, Total	mg/L	-0.0000452	0.00100	0.100	0.123	0.120	0.101	0.0850 to 0.115	105	70.0 to 130	2.47	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15560	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0897	0.0897	0.0892	0.0850 to 0.115	89.7	70.0 to 130	0.00	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15560	Boron, Total	mg/L	-0.00627	0.0650	1.00	0.997	1.01	0.999	0.850 to 1.15	99.7	70.0 to 130	1.30	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15560	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0973	0.0991	0.0995	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15560	Calcium, Total	mg/L	-0.0109	0.152	5.00	5.40	5.37	4.96	4.25 to 5.75	97.7	70.0 to 130	0.557	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15560	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0987	0.102	0.0994	0.0850 to 0.115	98.7	70.0 to 130	3.29	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15560	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15560	Iron, Total	mg/L	0.00260	0.0176	0.2	0.213	0.215	0.201	0.170 to 0.230	98.2	70.0 to 130	0.935	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. The matrix spike recovery for Total Organic Carbon was outside of specification limits. The matrix spike and matrix spike duplicate precision for Total Organic Carbon was outside of the specification limits.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 11:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15560

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15560	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15560	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.199	0.203	0.195	0.170 to 0.230	99.5	70.0 to 130	1.99	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15560	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	5.41	5.44	5.03	4.25 to 5.75	101	70.0 to 130	0.553	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15560	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.110	0.113	0.103	0.0850 to 0.115	102	70.0 to 130	2.69	20.0
BC15560	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00407	0.00407	0.00396	0.00340 to 0.00460	102	70.0 to 130	0.00	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15560	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.0988	0.0988	0.0985	0.0850 to 0.115	98.8	70.0 to 130	0.00	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15560	Potassium, Total	mg/L	0.00649	0.367	10.0	10.8	10.6	10.7	8.50 to 11.5	106	70.0 to 130	1.87	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15560	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0984	0.0991	0.0982	0.0850 to 0.115	98.4	70.0 to 130	0.709	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15560	Silicon, Total	mg/L	0.000521	0.0440	1.00	5.10	5.13	1.00	0.850 to 1.15	96.0	70.0 to 130	0.587	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15560	Sodium, Total	mg/L	-0.000326	0.0660	5.00	7.45	7.54	4.86	4.25 to 5.75	97.6	70.0 to 130	1.20	20.0
BC15560	Sulfate	mg/L	0.530	2.0	20.0	19.7	20.3	20.1	18.0 to 22.0	98.5	80.0 to 120	3.00	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15560	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC15560	Total Organic Carbon	mg/L	0.151	1.00	10.0	12.9	10.5	24.7		129	80.0 to 120	20.5	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. The matrix spike recovery for Total Organic Carbon was outside of specification limits. The matrix spike and matrix spike duplicate precision for Total Organic Carbon was outside of the specification limits.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 11:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15560

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15560	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.31	0.202	2.04	1.80 to 2.20	105	90.0 to 110	6.24	15.0
BC15565	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals. The matrix spike recovery for Total Organic Carbon was outside of specification limits. The matrix spike and matrix spike duplicate precision for Total Organic Carbon was outside of the specification limits.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 14:03  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15561

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 13:26		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/22 13:49	8/24/22 14:29		10.15	82.2	mg/L	0.70035	4.06	
* Iron, Total	8/23/22 13:49	8/24/22 13:26		1.015	0.0532	mg/L	0.008120	0.0406	
* Lithium, Total	8/23/22 13:49	8/24/22 13:26		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 13:26		1.015	9.09	mg/L	0.021315	0.406	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:26		1	6.87	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 13:26		1.015	3.21	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 13:26		1.015	5.75	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 14:04		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:13		10.15	78.6	mg/L	0.70035	4.06	RA
* Iron, Dissolved	8/23/22 12:15	8/25/22 14:04		1.015	0.0562	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 14:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 14:04		1.015	8.94	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 14:04		1	6.85	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 14:04		1.015	3.20	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 14:04		1.015	6.29	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 20:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 16:14		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	8/23/22 13:49	8/23/22 20:35		1.015	0.000335	mg/L	0.000081	0.000203	
* Barium, Total	8/23/22 13:49	8/23/22 20:35		1.015	0.0175	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 20:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 20:35		1.015	0.000400	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/23/22 13:49	8/23/22 20:35		1.015	0.000415	mg/L	0.000068	0.000203	
* Lead, Total	8/23/22 13:49	8/23/22 20:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/22 13:49	8/23/22 20:35		1.015	0.196	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:35		1.015	0.000232	mg/L	0.000102	0.000203	
* Potassium, Total	8/23/22 13:49	8/23/22 20:35		1.015	0.645	mg/L	0.169505	0.5075	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 14:03  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15561

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 20:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 20:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	0.000386	mg/L	0.000081	0.000203	
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	0.0199	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	0.000405	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	0.000538	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	0.000100	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	0.250	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	0.000304	mg/L	0.000102	0.000203	
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	0.729	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 11:58		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:22	8/23/22 12:22		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	199	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	212	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	199	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 22:50	8/25/22 22:50		1	3.40	mg/L	1.00	2	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 14:03  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15561

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:07	8/19/22 10:07		1	3.80	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:45	8/19/22 11:45		1	0.112	mg/L	0.06	0.125	J
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:57	8/18/22 15:57		1	6.63	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	8/16/22 13:59	8/16/22 13:59			399.01	uS/cm			FA
pH	8/16/22 13:59	8/16/22 13:59			6.70	SU			FA
Temperature	8/16/22 13:59	8/16/22 13:59			25.91	C			FA
Turbidity	8/16/22 13:59	8/16/22 13:59			0.92	NTU			FA
Sulfide	8/16/22 13:59	8/16/22 13:59			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 14:03  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15561

Sample	Analysis	Units	MB	MB		MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike					Rec	Limit		
BC15561	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15561	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0915	0.0949	0.0924	0.0850 to 0.115	91.5	70.0 to 130	3.65	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15561	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.0983	0.0996	0.100	0.0850 to 0.115	97.9	70.0 to 130	1.31	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15561	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	0.118	0.122	0.104	0.0850 to 0.115	98.1	70.0 to 130	3.33	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15561	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0868	0.0871	0.0913	0.0850 to 0.115	86.8	70.0 to 130	0.345	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15561	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.01	1.00	0.994	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15561	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0989	0.0978	0.101	0.0850 to 0.115	98.9	70.0 to 130	1.12	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15561	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	73.9	73.0	4.77	4.25 to 5.75	-94.0	70.0 to 130	1.23	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15561	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15561	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.102	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15561	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.249	0.251	0.199	0.170 to 0.230	96.4	70.0 to 130	0.800	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 14:03  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15561

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15561	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.104	0.106	0.105	0.0850 to 0.115	104	70.0 to 130	1.90	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15561	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.200	0.206	0.203	0.170 to 0.230	100	70.0 to 130	2.96	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15561	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	13.8	13.9	5.05	4.25 to 5.75	97.2	70.0 to 130	0.722	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15561	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.334	0.339	0.103	0.0850 to 0.115	84.0	70.0 to 130	1.49	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15561	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.0990	0.101	0.101	0.0850 to 0.115	98.7	70.0 to 130	2.00	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15561	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.1	11.2	10.6	8.50 to 11.5	104	70.0 to 130	0.897	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15561	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0996	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.40	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15561	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	4.22	4.17	0.987	0.850 to 1.15	102	70.0 to 130	1.19	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15561	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	11.2	11.6	5.05	4.25 to 5.75	98.2	70.0 to 130	3.51	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0
BC15561	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.106	0.109	0.107	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8		108	80.0 to 120	3.77	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 14:03  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15561

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15565	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 15:33  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15562

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 13:29		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 14:32		10.15	58.4	mg/L	0.70035	4.06		
* Iron, Total	8/23/22 13:49	8/24/22 13:29		1.015	0.358	mg/L	0.008120	0.0406		
* Lithium, Total	8/23/22 13:49	8/24/22 13:29		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 13:29		1.015	10.5	mg/L	0.021315	0.406		
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:29		1	8.32	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 13:29		1.015	3.89	mg/L	0.02030	0.25375		
* Sodium, Total	8/23/22 13:49	8/24/22 13:29		1.015	1.31	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	8/23/22 12:15	8/25/22 14:20		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:29		10.15	59.6	mg/L	0.70035	4.06		
* Iron, Dissolved	8/23/22 12:15	8/25/22 14:20		1.015	0.308	mg/L	0.008120	0.0406		
* Lithium, Dissolved	8/23/22 12:15	8/25/22 14:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 14:20		1.015	10.5	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 14:20		1	8.30	mg/L				
Silicon, Dissolved	8/23/22 12:15	8/25/22 14:20		1.015	3.88	mg/L	0.02030	0.25375		
* Sodium, Dissolved	8/23/22 12:15	8/25/22 14:20		1.015	1.44	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 20:39		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 16:18		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	8/23/22 13:49	8/23/22 20:39		1.015	0.00116	mg/L	0.000081	0.000203		
* Barium, Total	8/23/22 13:49	8/23/22 20:39		1.015	0.0275	mg/L	0.000508	0.001015		
* Beryllium, Total	8/23/22 13:49	8/23/22 20:39		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 20:39		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	8/23/22 13:49	8/23/22 20:39		1.015	0.000437	mg/L	0.000203	0.001015	J	
* Cobalt, Total	8/23/22 13:49	8/23/22 20:39		1.015	0.000133	mg/L	0.000068	0.000203	J	
* Lead, Total	8/23/22 13:49	8/23/22 20:39		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 20:39		1.015	0.106	mg/L	0.000152	0.001015		
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:39		1.015	0.00356	mg/L	0.000102	0.000203		
* Potassium, Total	8/23/22 13:49	8/23/22 20:39		1.015	1.39	mg/L	0.169505	0.5075		

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 15:33  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15562

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 20:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 20:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/25/22 14:23		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	0.00112	mg/L	0.000081	0.000203	
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	0.0267	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	0.000142	mg/L	0.000068	0.000203	J
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	0.0983	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	0.00344	mg/L	0.000102	0.000203	
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	1.42	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 12:01		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:24	8/23/22 12:24		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/29/22 11:45	8/29/22 14:58		1	170	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	162	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	168	mg/L			
Carbonate Alkalinity, (calc.)	8/29/22 11:45	8/29/22 14:58		1	2.13	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 23:10	8/25/22 23:10		1	Not Detected	mg/L	1.00	2	U

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/16/22 15:33  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15562

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:08	8/19/22 10:08		1	1.69	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:46	8/19/22 11:46		1	0.0979	mg/L	0.06	0.125	J
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:58	8/18/22 15:58		1	5.27	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	8/16/22 15:29	8/16/22 15:29			326.95	uS/cm			FA
pH	8/16/22 15:29	8/16/22 15:29			6.98	SU			FA
Temperature	8/16/22 15:29	8/16/22 15:29			21.67	C			FA
Turbidity	8/16/22 15:29	8/16/22 15:29			1.24	NTU			FA
Sulfide	8/16/22 15:29	8/16/22 15:29			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 15:33  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15562

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC15655	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15655	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0954	0.0930	0.0924	0.0850 to 0.115	95.4	70.0 to 130	2.55	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15655	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.101	0.101	0.100	0.0850 to 0.115	99.1	70.0 to 130	0.00	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15655	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	2.26	2.04	0.104	0.0850 to 0.115	20.0	70.0 to 130	10.2	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15655	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0882	0.0924	0.0913	0.0850 to 0.115	88.2	70.0 to 130	4.65	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15655	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.05	1.04	0.994	0.850 to 1.15	102	70.0 to 130	0.957	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15655	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0974	0.100	0.101	0.0850 to 0.115	97.4	70.0 to 130	2.63	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15655	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	49.9	46.2	4.77	4.25 to 5.75	66.0	70.0 to 130	7.70	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15655	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.0986	0.0989	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.304	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15655	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.0985	0.101	0.103	0.0850 to 0.115	98.5	70.0 to 130	2.51	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15655	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.368	0.367	0.199	0.170 to 0.230	98.0	70.0 to 130	0.272	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 15:33  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15562

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.214	0.216	0.203	0.170 to 0.230	102	70.0 to 130	0.930	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15655	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	26.0	26.5	5.05	4.25 to 5.75	104	70.0 to 130	1.90	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15655	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.107	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15655	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.102	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.98	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15655	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.2	11.4	10.6	8.50 to 11.5	101	70.0 to 130	1.77	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15655	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0983	0.0984	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.102	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15655	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	10.0	10.0	0.987	0.850 to 1.15	94.0	70.0 to 130	0.00	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15655	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	12.9	13.2	5.05	4.25 to 5.75	102	70.0 to 130	2.30	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0
BC15655	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8		108	80.0 to 120	3.77	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/16/22 15:33  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15562

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15562	Alkalinity to pH 4.5	mg CaCO3/L					170	50.3	45.0 to 55.0			0.00	10.0
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15565	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-1

**Location Code:** WMWGASGFB  
**Collected:** 8/16/22 16:00  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15563

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 13:32		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 13:32		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	8/23/22 13:49	8/24/22 13:32		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	8/23/22 13:49	8/24/22 13:32		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 13:32		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:32		1	Not Detected	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 13:32		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	8/23/22 13:49	8/24/22 13:32		1.015	Not Detected	mg/L	0.03045	0.406	U	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 16:21		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000152	0.001015	U	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	8/23/22 13:49	8/23/22 20:42		1.015	Not Detected	mg/L	0.000068	0.000203	U	
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>								
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 12:03		1	Not Detected	mg/L	0.0003	0.0005	U	
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>								
* Nitrogen, Nitrate/Nitrite	8/23/22 12:26	8/23/22 12:26		1	Not Detected	mg/L as N	0.20	0.3	U	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>								
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	Not Detected	mg/L		25	U	

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

**Comments:**



# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-1

**Location Code:** WMWGASGFB

**Collected:** 8/16/22 16:00

**Customer ID:**

**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15563

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 23:32	8/25/22 23:32		1	Not Detected	mg/L	1.00	2	U
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:10	8/19/22 10:10		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:47	8/19/22 11:47		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 15:59	8/18/22 15:59		1	Not Detected	mg/L	0.6	2	U

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

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**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 8/16/22 16:00

**Customer ID:**

**Delivery Date:** 8/18/22 09:10

**Description:** Gaston Gypsum Field Blank-1

**Laboratory ID Number:** BC15563

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 8/16/22 16:00

**Customer ID:**

**Delivery Date:** 8/18/22 09:10

**Description:** Gaston Gypsum Field Blank-1

**Laboratory ID Number:** BC15563

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115		104	70.0 to 130		0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8			108	80.0 to 120		3.77	20.0

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**Comments:**

## Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 8/16/22 16:00

**Customer ID:**

**Delivery Date:** 8/18/22 09:10

**Description:** Gaston Gypsum Field Blank-1

**Laboratory ID Number:** BC15563

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit	Prec	Prec Limit
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15565	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

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**Comments:**

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 10:15  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15564

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 13:35		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/22 13:49	8/24/22 14:35		10.15	67.7	mg/L	0.70035	4.06	
* Iron, Total	8/23/22 13:49	8/24/22 13:35		1.015	0.0334	mg/L	0.008120	0.0406	J
* Lithium, Total	8/23/22 13:49	8/24/22 13:35		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 13:35		1.015	7.47	mg/L	0.021315	0.406	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:35		1	8.99	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 13:35		1.015	4.20	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 13:35		1.015	2.64	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 14:23		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:32		10.15	64.4	mg/L	0.70035	4.06	
* Iron, Dissolved	8/23/22 12:15	8/25/22 14:23		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	8/23/22 12:15	8/25/22 14:23		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 14:23		1.015	7.41	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 14:23		1	8.90	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 14:23		1.015	4.16	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 14:23		1.015	2.65	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 20:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 16:25		1.015	0.0163	mg/L	0.006090	0.01015	
* Arsenic, Total	8/23/22 13:49	8/23/22 20:46		1.015	0.0000855	mg/L	0.000081	0.000203	J
* Barium, Total	8/23/22 13:49	8/23/22 20:46		1.015	0.0237	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 20:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 20:46		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/22 13:49	8/23/22 20:46		1.015	0.000132	mg/L	0.000068	0.000203	J
* Lead, Total	8/23/22 13:49	8/23/22 20:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/22 13:49	8/23/22 20:46		1.015	0.0246	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:46		1.015	0.000338	mg/L	0.000102	0.000203	
* Potassium, Total	8/23/22 13:49	8/23/22 20:46		1.015	0.748	mg/L	0.169505	0.5075	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 10:15  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15564

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 20:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 20:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/25/22 14:27		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	0.0231	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	0.000115	mg/L	0.000068	0.000203	J
* Lead, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	0.0252	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	0.000346	mg/L	0.000102	0.000203	
* Potassium, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	0.783	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 18:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 12:06		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:28	8/23/22 12:28		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/30/22 14:05	8/30/22 15:54		1	164	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	179	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	162	mg/L			
Carbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	2.20	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/25/22 23:49	8/25/22 23:49		1	3.08	mg/L	1.00	2	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 10:15  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15564

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:11	8/19/22 10:11		1	2.13	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:48	8/19/22 11:48		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 16:00	8/18/22 16:00		1	4.58	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	8/17/22 10:13	8/17/22 10:13			310.19	uS/cm			FA
pH	8/17/22 10:13	8/17/22 10:13			6.84	SU			FA
Temperature	8/17/22 10:13	8/17/22 10:13			20.22	C			FA
Turbidity	8/17/22 10:13	8/17/22 10:13			1.3	NTU			FA
Sulfide	8/17/22 10:13	8/17/22 10:13			0	mg/L			FA

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

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**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 10:15  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15564

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15655	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0954	0.0930	0.0924	0.0850 to 0.115	95.4	70.0 to 130	2.55	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15655	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.101	0.101	0.100	0.0850 to 0.115	99.1	70.0 to 130	0.00	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15655	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	2.26	2.04	0.104	0.0850 to 0.115	20.0	70.0 to 130	10.2	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15655	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0882	0.0924	0.0913	0.0850 to 0.115	88.2	70.0 to 130	4.65	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15655	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.05	1.04	0.994	0.850 to 1.15	102	70.0 to 130	0.957	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15655	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0974	0.100	0.101	0.0850 to 0.115	97.4	70.0 to 130	2.63	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15655	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	49.9	46.2	4.77	4.25 to 5.75	66.0	70.0 to 130	7.70	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15655	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.0986	0.0989	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.304	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15655	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.0985	0.101	0.103	0.0850 to 0.115	98.5	70.0 to 130	2.51	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15655	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.368	0.367	0.199	0.170 to 0.230	98.0	70.0 to 130	0.272	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 10:15  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15564

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.214	0.216	0.203	0.170 to 0.230	102	70.0 to 130	0.930	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15655	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	26.0	26.5	5.05	4.25 to 5.75	104	70.0 to 130	1.90	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15655	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.107	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15655	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.102	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.98	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15655	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.2	11.4	10.6	8.50 to 11.5	101	70.0 to 130	1.77	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15655	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0983	0.0984	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.102	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15655	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	10.0	10.0	0.987	0.850 to 1.15	94.0	70.0 to 130	0.00	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15655	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	12.9	13.2	5.05	4.25 to 5.75	102	70.0 to 130	2.30	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0
BC15655	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8		108	80.0 to 120	3.77	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 10:15  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15564

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15655	Alkalinity to pH 4.5	mg CaCO3/L					203	50.5	45.0 to 55.0			0.00	10.0
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15655	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 11:00  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15565

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 13:38		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 14:45		10.15	118	mg/L	0.70035	4.06		
* Iron, Total	8/23/22 13:49	8/24/22 13:38		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	8/23/22 13:49	8/24/22 13:38		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 13:38		1.015	1.63	mg/L	0.021315	0.406		
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:38		1	9.01	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 13:38		1.015	4.21	mg/L	0.02030	0.25375		
* Sodium, Total	8/23/22 13:49	8/24/22 13:38		1.015	1.89	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Dissolved	8/23/22 12:15	8/25/22 14:26		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:35		10.15	120	mg/L	0.70035	4.06		
* Iron, Dissolved	8/23/22 12:15	8/25/22 14:26		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 14:26		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 14:26		1.015	1.64	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 14:26		1	9.05	mg/L				
Silicon, Dissolved	8/23/22 12:15	8/25/22 14:26		1.015	4.23	mg/L	0.02030	0.25375		
* Sodium, Dissolved	8/23/22 12:15	8/25/22 14:26		1.015	1.92	mg/L	0.03045	0.406		
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 16:28		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	8/23/22 13:49	8/23/22 20:50		1.015	0.0361	mg/L	0.000508	0.001015		
* Beryllium, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 20:50		1.015	0.000143	mg/L	0.000068	0.000203	J	
* Chromium, Total	8/23/22 13:49	8/23/22 20:50		1.015	0.000266	mg/L	0.000203	0.001015	J	
* Cobalt, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 20:50		1.015	0.0180	mg/L	0.000152	0.001015		
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.169505	0.5075	U	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 11:00  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15565

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 20:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/25/22 14:30		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	0.0350	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	0.0000720	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	0.0190	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	0.188	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 12:08		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:30	8/23/22 12:30		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/30/22 14:05	8/30/22 15:54		1	253	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	265	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	252	mg/L			
Carbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	1.27	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/26/22 00:07	8/26/22 00:07		1	3.90	mg/L	1.00	2	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 11:00  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15565

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:12	8/19/22 10:12		1	3.11	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:50	8/19/22 11:50		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 16:02	8/18/22 16:02		1	2.24	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	8/17/22 10:56	8/17/22 10:56			478.07	uS/cm			FA
pH	8/17/22 10:56	8/17/22 10:56			6.97	SU			FA
Temperature	8/17/22 10:56	8/17/22 10:56			21.00	C			FA
Turbidity	8/17/22 10:56	8/17/22 10:56			0.6	NTU			FA
Sulfide	8/17/22 10:56	8/17/22 10:56			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 11:00  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15565

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC15655	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15655	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0954	0.0930	0.0924	0.0850 to 0.115	95.4	70.0 to 130	2.55	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15655	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.101	0.101	0.100	0.0850 to 0.115	99.1	70.0 to 130	0.00	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15655	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	2.26	2.04	0.104	0.0850 to 0.115	20.0	70.0 to 130	10.2	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15655	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0882	0.0924	0.0913	0.0850 to 0.115	88.2	70.0 to 130	4.65	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15655	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.05	1.04	0.994	0.850 to 1.15	102	70.0 to 130	0.957	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15655	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0974	0.100	0.101	0.0850 to 0.115	97.4	70.0 to 130	2.63	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15655	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	49.9	46.2	4.77	4.25 to 5.75	66.0	70.0 to 130	7.70	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15655	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.0986	0.0989	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.304	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15655	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.0985	0.101	0.103	0.0850 to 0.115	98.5	70.0 to 130	2.51	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15655	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.368	0.367	0.199	0.170 to 0.230	98.0	70.0 to 130	0.272	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 11:00  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15565

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.214	0.216	0.203	0.170 to 0.230	102	70.0 to 130	0.930	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15655	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	26.0	26.5	5.05	4.25 to 5.75	104	70.0 to 130	1.90	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15655	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.107	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15655	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.102	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.98	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15655	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.2	11.4	10.6	8.50 to 11.5	101	70.0 to 130	1.77	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15655	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0983	0.0984	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.102	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15655	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	10.0	10.0	0.987	0.850 to 1.15	94.0	70.0 to 130	0.00	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15655	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	12.9	13.2	5.05	4.25 to 5.75	102	70.0 to 130	2.30	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0
BC15655	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8		108	80.0 to 120	3.77	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 11:00  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15565

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC15655	Alkalinity to pH 4.5	mg CaCO3/L					203	50.5	45.0 to 55.0			0.00	10.0
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15655	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 11:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15566

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 13:41		1.015	0.0528	mg/L	0.030000	0.1015	J
* Calcium, Total	8/23/22 13:49	8/24/22 13:41		1.015	12.6	mg/L	0.070035	0.406	
* Iron, Total	8/23/22 13:49	8/24/22 13:41		1.015	0.0213	mg/L	0.008120	0.0406	J
* Lithium, Total	8/23/22 13:49	8/24/22 13:41		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 13:41		1.015	2.25	mg/L	0.021315	0.406	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:41		1	7.43	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 13:41		1.015	3.47	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 13:41		1.015	6.54	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 14:29		1.015	0.0578	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/23/22 12:15	8/25/22 14:29		1.015	12.0	mg/L	0.070035	0.406	
* Iron, Dissolved	8/23/22 12:15	8/25/22 14:29		1.015	0.0217	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	8/23/22 12:15	8/25/22 14:29		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 14:29		1.015	2.25	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 14:29		1	7.30	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 14:29		1.015	3.41	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 14:29		1.015	6.74	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 20:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 16:32		1.015	0.00627	mg/L	0.006090	0.01015	J
* Arsenic, Total	8/23/22 13:49	8/23/22 20:53		1.015	0.000109	mg/L	0.000081	0.000203	J
* Barium, Total	8/23/22 13:49	8/23/22 20:53		1.015	0.0131	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 20:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 20:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/22 13:49	8/23/22 20:53		1.015	0.00278	mg/L	0.000068	0.000203	
* Lead, Total	8/23/22 13:49	8/23/22 20:53		1.015	0.0000784	mg/L	0.000068	0.000203	J
* Manganese, Total	8/23/22 13:49	8/23/22 20:53		1.015	0.192	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	8/23/22 13:49	8/23/22 20:53		1.015	0.271	mg/L	0.169505	0.5075	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 11:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15566

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 20:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 20:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/25/22 14:34		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	0.0127	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	0.00281	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	0.000105	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	0.194	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	0.252	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 19:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 12:10		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:30	8/23/22 12:30		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/30/22 14:05	8/30/22 15:54		1	27.0	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	76.0	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	26.9	mg/L			
Carbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	Not Detected	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/26/22 00:31	8/26/22 00:31		1	1.16	mg/L	1.00	2	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/17/22 11:55  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15566

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:13	8/19/22 10:13		1	19.5	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:51	8/19/22 11:51		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 16:03	8/18/22 16:03		1	2.29	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: TJD</b>							
Conductivity	8/17/22 11:52	8/17/22 11:52			123.98	uS/cm			FA
pH	8/17/22 11:52	8/17/22 11:52			5.60	SU			FA
Temperature	8/17/22 11:52	8/17/22 11:52			21.58	C			FA
Turbidity	8/17/22 11:52	8/17/22 11:52			0.35	NTU			FA
Sulfide	8/17/22 11:52	8/17/22 11:52			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 11:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15566

Sample	Analysis	Units	MB	MB		MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike					Rec	Limit		
BC15655	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15655	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0954	0.0930	0.0924	0.0850 to 0.115	95.4	70.0 to 130	2.55	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15655	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.101	0.101	0.100	0.0850 to 0.115	99.1	70.0 to 130	0.00	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15655	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	2.26	2.04	0.104	0.0850 to 0.115	20.0	70.0 to 130	10.2	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15655	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0882	0.0924	0.0913	0.0850 to 0.115	88.2	70.0 to 130	4.65	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15655	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.05	1.04	0.994	0.850 to 1.15	102	70.0 to 130	0.957	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15655	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0974	0.100	0.101	0.0850 to 0.115	97.4	70.0 to 130	2.63	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15655	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	49.9	46.2	4.77	4.25 to 5.75	66.0	70.0 to 130	7.70	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15655	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.0986	0.0989	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.304	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15655	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.0985	0.101	0.103	0.0850 to 0.115	98.5	70.0 to 130	2.51	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15655	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.368	0.367	0.199	0.170 to 0.230	98.0	70.0 to 130	0.272	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 11:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15566

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.214	0.216	0.203	0.170 to 0.230	102	70.0 to 130	0.930	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15655	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	26.0	26.5	5.05	4.25 to 5.75	104	70.0 to 130	1.90	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15655	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.107	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15655	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.102	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.98	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15655	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.2	11.4	10.6	8.50 to 11.5	101	70.0 to 130	1.77	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15655	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0983	0.0984	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.102	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15655	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	10.0	10.0	0.987	0.850 to 1.15	94.0	70.0 to 130	0.00	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15655	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	12.9	13.2	5.05	4.25 to 5.75	102	70.0 to 130	2.30	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0
BC15655	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8		108	80.0 to 120	3.77	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/17/22 11:55  
**Customer ID:**  
**Delivery Date:** 8/18/22 09:10

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

**Laboratory ID Number:** BC15566

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15655	Alkalinity to pH 4.5	mg CaCO3/L					203	50.5	45.0 to 55.0			0.00	10.0
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15655	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

**Description:** Gaston Gypsum Equipment Blank-1

**Location Code:** WMWGASGEB  
**Collected:** 8/17/22 12:15  
**Customer ID:**  
**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15567

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>					
* Boron, Total	8/23/22 13:49	8/24/22 13:45		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	8/23/22 13:49	8/24/22 13:45		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	8/23/22 13:49	8/24/22 13:45		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	8/23/22 13:49	8/24/22 13:45		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	8/23/22 13:49	8/24/22 13:45		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:45		1	Not Detected	mg/L				
Silicon, Total	8/23/22 13:49	8/24/22 13:45		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	8/23/22 13:49	8/24/22 13:45		1.015	Not Detected	mg/L	0.03045	0.406	U	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>					
* Antimony, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	8/23/22 13:49	8/25/22 16:36		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Beryllium, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000152	0.001015	U	
* Molybdenum, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	8/23/22 13:49	8/23/22 20:57		1.015	Not Detected	mg/L	0.000068	0.000203	U	
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>								
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 12:13		1	Not Detected	mg/L	0.0003	0.0005	U	
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>								
* Nitrogen, Nitrate/Nitrite	8/23/22 12:31	8/23/22 12:31		1	Not Detected	mg/L as N	0.20	0.3	U	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>								
* Solids, Dissolved	8/18/22 11:45	8/19/22 13:40		1	Not Detected	mg/L		25	U	

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

**Comments:**

# Certificate Of Analysis

**Description:** Gaston Gypsum Equipment Blank-1

**Location Code:** WMWGASGEB

**Collected:** 8/17/22 12:15

**Customer ID:**

**Submittal Date:** 8/18/22 09:10

**Laboratory ID Number:** BC15567

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/26/22 00:53	8/26/22 00:53		1	Not Detected	mg/L	1.00	2	U
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:14	8/19/22 10:14		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:52	8/19/22 11:52		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 16:04	8/18/22 16:04		1	Not Detected	mg/L	0.6	2	U

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

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**Comments:**



# Batch QC Summary

**Customer Account:** WMWGASGEB

**Sample Date:** 8/17/22 12:15

**Customer ID:**

**Delivery Date:** 8/18/22 09:10

**Description:** Gaston Gypsum Equipment Blank-1

**Laboratory ID Number:** BC15567

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGEB

**Sample Date:** 8/17/22 12:15

**Customer ID:**

**Delivery Date:** 8/18/22 09:10

**Description:** Gaston Gypsum Equipment Blank-1

**Laboratory ID Number:** BC15567

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	Limit
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8		108	80.0 to 120	3.77	20.0

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGASGEB

**Sample Date:** 8/17/22 12:15

**Customer ID:**

**Delivery Date:** 8/18/22 09:10

**Description:** Gaston Gypsum Equipment Blank-1

**Laboratory ID Number:** BC15567

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15565	Solids, Dissolved	mg/L	1.00	25.0			262	52.0	40.0 to 60.0			1.14	10.0

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**Comments:**

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/18/22 10:16  
**Customer ID:**  
**Submittal Date:** 8/18/22 12:46

**Laboratory ID Number:** BC15654

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 13:48		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/22 13:49	8/24/22 14:48		10.15	110	mg/L	0.70035	4.06	
* Iron, Total	8/23/22 13:49	8/24/22 13:48		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/23/22 13:49	8/24/22 13:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/22 13:49	8/24/22 13:48		1.015	7.67	mg/L	0.021315	0.406	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:48		1	7.55	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 13:48		1.015	3.53	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 13:48		1.015	2.30	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 14:32		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:39		10.15	88.3	mg/L	0.70035	4.06	
* Iron, Dissolved	8/23/22 12:15	8/25/22 14:32		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	8/23/22 12:15	8/25/22 14:32		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 14:32		1.015	7.53	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 14:32		1	7.45	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 14:32		1.015	3.48	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 14:32		1.015	2.28	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 21:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 16:39		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	8/23/22 13:49	8/23/22 21:01		1.015	0.000189	mg/L	0.000081	0.000203	J
* Barium, Total	8/23/22 13:49	8/23/22 21:01		1.015	0.0204	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/22 13:49	8/23/22 21:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 21:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 21:01		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/22 13:49	8/23/22 21:01		1.015	0.000296	mg/L	0.000068	0.000203	
* Lead, Total	8/23/22 13:49	8/23/22 21:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/22 13:49	8/23/22 21:01		1.015	0.159	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 21:01		1.015	0.000207	mg/L	0.000102	0.000203	
* Potassium, Total	8/23/22 13:49	8/23/22 21:01		1.015	0.272	mg/L	0.169505	0.5075	J

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/18/22 10:16  
**Customer ID:**  
**Submittal Date:** 8/18/22 12:46

**Laboratory ID Number:** BC15654

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 21:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 21:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/25/22 14:37		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	0.000136	mg/L	0.000081	0.000203	J
* Barium, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	0.0214	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	0.000321	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	0.160	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	0.000254	mg/L	0.000102	0.000203	
* Potassium, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	0.251	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 19:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 12:15		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:32	8/23/22 12:32		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/30/22 14:05	8/30/22 15:54		1	217	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/19/22 09:23	8/22/22 13:16		1	252	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	216	mg/L			
Carbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	0.89	mg/L		0.5	
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/26/22 01:13	8/26/22 01:13		1	Not Detected	mg/L	1.00	2	U

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/18/22 10:16  
**Customer ID:**  
**Submittal Date:** 8/18/22 12:46

**Laboratory ID Number:** BC15654

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:16	8/19/22 10:16		1	3.53	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:53	8/19/22 11:53		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 16:05	8/18/22 16:05		1	6.66	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	8/18/22 10:13	8/18/22 10:13			382.70	uS/cm			FA
pH	8/18/22 10:13	8/18/22 10:13			6.82	SU			FA
Temperature	8/18/22 10:13	8/18/22 10:13			20.92	C			FA
Turbidity	8/18/22 10:13	8/18/22 10:13			1.14	NTU			FA
Sulfide	8/18/22 10:13	8/18/22 10:13			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/18/22 10:16  
**Customer ID:**  
**Delivery Date:** 8/18/22 12:46

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

**Laboratory ID Number:** BC15654

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15655	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0954	0.0930	0.0924	0.0850 to 0.115	95.4	70.0 to 130	2.55	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15655	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.101	0.101	0.100	0.0850 to 0.115	99.1	70.0 to 130	0.00	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15655	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	2.26	2.04	0.104	0.0850 to 0.115	20.0	70.0 to 130	10.2	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15655	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0882	0.0924	0.0913	0.0850 to 0.115	88.2	70.0 to 130	4.65	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15655	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.05	1.04	0.994	0.850 to 1.15	102	70.0 to 130	0.957	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15655	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0974	0.100	0.101	0.0850 to 0.115	97.4	70.0 to 130	2.63	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15655	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	49.9	46.2	4.77	4.25 to 5.75	66.0	70.0 to 130	7.70	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15655	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.0986	0.0989	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.304	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15655	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.0985	0.101	0.103	0.0850 to 0.115	98.5	70.0 to 130	2.51	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15655	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.368	0.367	0.199	0.170 to 0.230	98.0	70.0 to 130	0.272	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/18/22 10:16  
**Customer ID:**  
**Delivery Date:** 8/18/22 12:46

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

**Laboratory ID Number:** BC15654

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.214	0.216	0.203	0.170 to 0.230	102	70.0 to 130	0.930	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15655	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	26.0	26.5	5.05	4.25 to 5.75	104	70.0 to 130	1.90	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15655	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.107	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15655	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.102	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.98	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15655	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.2	11.4	10.6	8.50 to 11.5	101	70.0 to 130	1.77	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15655	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0983	0.0984	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.102	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15655	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	10.0	10.0	0.987	0.850 to 1.15	94.0	70.0 to 130	0.00	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15655	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	12.9	13.2	5.05	4.25 to 5.75	102	70.0 to 130	2.30	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0
BC15655	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8		108	80.0 to 120	3.77	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.



## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/18/22 10:16  
**Customer ID:**  
**Delivery Date:** 8/18/22 12:46

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

**Laboratory ID Number:** BC15654

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15655	Alkalinity to pH 4.5	mg CaCO3/L					203	50.5	45.0 to 55.0			0.00	10.0
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15655	Solids, Dissolved	mg/L	1.00	25.0			214	52.0	40.0 to 60.0			0.00	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/18/22 11:12  
**Customer ID:**  
**Submittal Date:** 8/18/22 12:46

**Laboratory ID Number:** BC15655

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	8/23/22 13:49	8/24/22 13:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/22 13:49	8/24/22 14:51		10.15	53.5	mg/L	0.70035	4.06	
* Iron, Total	8/23/22 13:49	8/24/22 13:51		1.015	0.176	mg/L	0.008120	0.0406	
* Lithium, Total	8/23/22 13:49	8/24/22 13:51		1.015	0.00965	mg/L	0.007105	0.01999956	J
* Magnesium, Total	8/23/22 13:49	8/24/22 13:51		1.015	20.9	mg/L	0.021315	0.406	
Silica, Total (calc.)	8/23/22 13:49	8/24/22 13:51		1	19.6	mg/L			
Silicon, Total	8/23/22 13:49	8/24/22 13:51		1.015	9.14	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/22 13:49	8/24/22 13:51		1.015	7.86	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Dissolved	8/23/22 12:15	8/25/22 14:35		1.015	0.0335	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/23/22 12:15	8/25/22 15:42		10.15	46.6	mg/L	0.70035	4.06	RA
* Iron, Dissolved	8/23/22 12:15	8/25/22 14:35		1.015	0.172	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/23/22 12:15	8/25/22 14:35		1.015	0.00958	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	8/23/22 12:15	8/25/22 14:35		1.015	20.8	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	8/23/22 12:15	8/25/22 14:35		1	19.4	mg/L			
Silicon, Dissolved	8/23/22 12:15	8/25/22 14:35		1.015	9.06	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/22 12:15	8/25/22 14:35		1.015	7.81	mg/L	0.03045	0.406	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	8/23/22 13:49	8/23/22 21:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	8/23/22 13:49	8/25/22 16:43		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	8/23/22 13:49	8/23/22 21:04		1.015	0.00199	mg/L	0.000081	0.000203	
* Barium, Total	8/23/22 13:49	8/25/22 16:57		5.075	2.23	mg/L	0.002538	0.005075	RA
* Beryllium, Total	8/23/22 13:49	8/23/22 21:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/22 13:49	8/23/22 21:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/22 13:49	8/23/22 21:04		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/22 13:49	8/23/22 21:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	8/23/22 13:49	8/23/22 21:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/22 13:49	8/23/22 21:04		1.015	0.00602	mg/L	0.000152	0.001015	
* Molybdenum, Total	8/23/22 13:49	8/23/22 21:04		1.015	0.00295	mg/L	0.000102	0.000203	
* Potassium, Total	8/23/22 13:49	8/23/22 21:04		1.015	1.14	mg/L	0.169505	0.5075	

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/18/22 11:12  
**Customer ID:**  
**Submittal Date:** 8/18/22 12:46

**Laboratory ID Number:** BC15655

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	8/23/22 13:49	8/23/22 21:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/22 13:49	8/23/22 21:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	8/23/22 12:15	8/25/22 14:41		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	0.00194	mg/L	0.000081	0.000203	
* Barium, Dissolved	8/23/22 12:15	8/25/22 14:51		5.075	2.24	mg/L	0.002538	0.005075	RA
* Beryllium, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	0.00556	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	0.00317	mg/L	0.000102	0.000203	
* Potassium, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	1.11	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/22 12:15	8/23/22 19:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: ELH</b>							
* Mercury, Total by CVAA	9/1/22 08:04	9/1/22 12:17		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: EPA 353.2</b>		<b>Analyst: CES</b>							
* Nitrogen, Nitrate/Nitrite	8/23/22 12:33	8/23/22 12:33		1	Not Detected	mg/L as N	0.20	0.3	U
<b>Analytical Method: SM 2320 B</b>		<b>Analyst: ALH</b>							
Alkalinity to pH 4.5	8/30/22 14:05	8/30/22 15:54		1	203	mg CaCO3/L		0.1	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	8/19/22 09:23	8/22/22 13:16		1	214	mg/L		25	
<b>Analytical Method: SM 4500CO2 D</b>		<b>Analyst: ALH</b>							
Bicarbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	201	mg/L			
Carbonate Alkalinity, (calc.)	8/30/22 14:05	8/30/22 15:54		1	2.27	mg/L			
<b>Analytical Method: SM 5310 B</b>		<b>Analyst: ELH</b>							
* Total Organic Carbon	8/26/22 01:34	8/26/22 01:34		1	Not Detected	mg/L	1.00	2	U

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Certificate Of Analysis

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

**Location Code:** WMWGASG  
**Collected:** 8/18/22 11:12  
**Customer ID:**  
**Submittal Date:** 8/18/22 12:46

**Laboratory ID Number:** BC15655

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	8/19/22 10:17	8/19/22 10:17		1	2.30	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	8/19/22 11:54	8/19/22 11:54		1	0.327	mg/L	0.06	0.125	
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	8/18/22 16:07	8/18/22 16:07		1	4.84	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	8/18/22 11:09	8/18/22 11:09			336.43	uS/cm			FA
pH	8/18/22 11:09	8/18/22 11:09			7.46	SU			FA
Temperature	8/18/22 11:09	8/18/22 11:09			20.53	C			FA
Turbidity	8/18/22 11:09	8/18/22 11:09			0.79	NTU			FA
Sulfide	8/18/22 11:09	8/18/22 11:09			0	mg/L			FA

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

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/18/22 11:12  
**Customer ID:**  
**Delivery Date:** 8/18/22 12:46

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

**Laboratory ID Number:** BC15655

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Aluminum, Dissolved	mg/L	0.000844	0.010	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Aluminum, Total	mg/L	-0.00197	0.010	0.100	0.102	0.103	0.0979	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC15655	Antimony, Dissolved	mg/L	0.000355	0.00100	0.100	0.0954	0.0930	0.0924	0.0850 to 0.115	95.4	70.0 to 130	2.55	20.0
BC15655	Antimony, Total	mg/L	0.000394	0.00100	0.100	0.100	0.0986	0.0973	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BC15655	Arsenic, Dissolved	mg/L	-0.0000034	0.000176	0.100	0.101	0.101	0.100	0.0850 to 0.115	99.1	70.0 to 130	0.00	20.0
BC15655	Arsenic, Total	mg/L	0.0000105	0.000176	0.100	0.102	0.100	0.0997	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC15655	Barium, Dissolved	mg/L	-0.0000110	0.00100	0.100	2.26	2.04	0.104	0.0850 to 0.115	20.0	70.0 to 130	10.2	20.0
BC15655	Barium, Total	mg/L	-0.0000452	0.00100	0.100	2.26	2.31	0.101	0.0850 to 0.115	30.0	70.0 to 130	2.19	20.0
BC15655	Beryllium, Dissolved	mg/L	0.0000270	0.000880	0.100	0.0882	0.0924	0.0913	0.0850 to 0.115	88.2	70.0 to 130	4.65	20.0
BC15655	Beryllium, Total	mg/L	-0.0000129	0.000880	0.100	0.0918	0.0912	0.0892	0.0850 to 0.115	91.8	70.0 to 130	0.656	20.0
BC15655	Boron, Dissolved	mg/L	-0.000668	0.0650	1.00	1.05	1.04	0.994	0.850 to 1.15	102	70.0 to 130	0.957	20.0
BC15655	Boron, Total	mg/L	-0.00627	0.0650	1.00	1.04	1.04	0.999	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BC15655	Cadmium, Dissolved	mg/L	-0.0000092	0.000147	0.100	0.0974	0.100	0.101	0.0850 to 0.115	97.4	70.0 to 130	2.63	20.0
BC15655	Cadmium, Total	mg/L	-0.0000003	0.000147	0.100	0.0980	0.0987	0.0995	0.0850 to 0.115	98.0	70.0 to 130	0.712	20.0
BC15655	Calcium, Dissolved	mg/L	-0.00968	0.152	5.00	49.9	46.2	4.77	4.25 to 5.75	66.0	70.0 to 130	7.70	20.0
BC15655	Calcium, Total	mg/L	-0.0109	0.152	5.00	59.4	58.6	4.96	4.25 to 5.75	118	70.0 to 130	1.36	20.0
BC15655	Chloride	mg/L	-0.0975	1.00	10.0	13.0	13.1	10.4	9.00 to 11.0	107	80.0 to 120	0.766	20.0
BC15655	Chromium, Dissolved	mg/L	-0.0000822	0.000440	0.100	0.0986	0.0989	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.304	20.0
BC15655	Chromium, Total	mg/L	-0.0000041	0.000440	0.100	0.0998	0.0983	0.0994	0.0850 to 0.115	99.8	70.0 to 130	1.51	20.0
BC15655	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.0985	0.101	0.103	0.0850 to 0.115	98.5	70.0 to 130	2.51	20.0
BC15655	Cobalt, Total	mg/L	0.0000073	0.000147	0.100	0.101	0.0991	0.103	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BC15655	Fluoride	mg/L	0.013	0.125	2.50	2.92	2.92	2.60	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BC15655	Iron, Dissolved	mg/L	-0.000021	0.0176	0.2	0.368	0.367	0.199	0.170 to 0.230	98.0	70.0 to 130	0.272	20.0
BC15655	Iron, Total	mg/L	0.00260	0.0176	0.2	0.375	0.399	0.201	0.170 to 0.230	99.5	70.0 to 130	6.20	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/18/22 11:12  
**Customer ID:**  
**Delivery Date:** 8/18/22 12:46

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

**Laboratory ID Number:** BC15655

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC15655	Lead, Dissolved	mg/L	-0.0000034	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC15655	Lead, Total	mg/L	-0.0000061	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC15655	Lithium, Dissolved	mg/L	0.000224	0.0154	0.200	0.214	0.216	0.203	0.170 to 0.230	102	70.0 to 130	0.930	20.0
BC15655	Lithium, Total	mg/L	0.000319	0.0154	0.200	0.210	0.209	0.195	0.170 to 0.230	100	70.0 to 130	0.477	20.0
BC15655	Magnesium, Dissolved	mg/L	0.00342	0.0462	5.00	26.0	26.5	5.05	4.25 to 5.75	104	70.0 to 130	1.90	20.0
BC15655	Magnesium, Total	mg/L	-0.00142	0.0462	5.00	25.9	25.7	5.03	4.25 to 5.75	100	70.0 to 130	0.775	20.0
BC15655	Manganese, Dissolved	mg/L	-0.0000197	0.00033	0.100	0.107	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC15655	Manganese, Total	mg/L	0.0000040	0.00033	0.100	0.108	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	1.87	20.0
BC15655	Mercury, Total by CVAA	mg/L	-1.100E-05	0.000500	0.004	0.00341	0.00339	0.00355	0.00340 to 0.00460	85.2	70.0 to 130	0.588	20.0
BC15655	Molybdenum, Dissolved	mg/L	0.0000133	0.0002	0.100	0.102	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.98	20.0
BC15655	Molybdenum, Total	mg/L	0.0000088	0.0002	0.100	0.102	0.0997	0.0985	0.0850 to 0.115	99.0	70.0 to 130	2.28	20.0
BC15655	Potassium, Dissolved	mg/L	0.00742	0.367	10.0	11.2	11.4	10.6	8.50 to 11.5	101	70.0 to 130	1.77	20.0
BC15655	Potassium, Total	mg/L	0.00649	0.367	10.0	11.8	11.6	10.7	8.50 to 11.5	107	70.0 to 130	1.71	20.0
BC15655	Selenium, Dissolved	mg/L	0.000145	0.00100	0.100	0.0983	0.0984	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.102	20.0
BC15655	Selenium, Total	mg/L	0.0000795	0.00100	0.100	0.0970	0.0960	0.0982	0.0850 to 0.115	97.0	70.0 to 130	1.04	20.0
BC15655	Silicon, Dissolved	mg/L	0.000197	0.0440	1.00	10.0	10.0	0.987	0.850 to 1.15	94.0	70.0 to 130	0.00	20.0
BC15655	Silicon, Total	mg/L	0.000521	0.0440	1.00	10.2	10.1	1.00	0.850 to 1.15	106	70.0 to 130	0.985	20.0
BC15655	Sodium, Dissolved	mg/L	0.00391	0.0660	5.00	12.9	13.2	5.05	4.25 to 5.75	102	70.0 to 130	2.30	20.0
BC15655	Sodium, Total	mg/L	-0.000326	0.0660	5.00	13.0	12.9	4.86	4.25 to 5.75	103	70.0 to 130	0.772	20.0
BC15655	Sulfate	mg/L	0.353	2.0	20.0	25.1	24.6	20.2	18.0 to 22.0	101	80.0 to 120	2.01	20.0
BC15655	Thallium, Dissolved	mg/L	0.0000004	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC15655	Thallium, Total	mg/L	0.0000028	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC15655	Total Organic Carbon	mg/L	0.151	1.00	10.0	10.8	10.4	24.8		108	80.0 to 120	3.77	20.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 8/18/22 11:12  
**Customer ID:**  
**Delivery Date:** 8/18/22 12:46

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

**Laboratory ID Number:** BC15655

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC15655	Alkalinity to pH 4.5	mg CaCO3/L					203	50.5	45.0 to 55.0			0.00	10.0
BC15655	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.95	-0.028	1.90	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BC15655	Solids, Dissolved	mg/L	1.00	25.0			214	52.0	40.0 to 60.0			0.00	10.0

**Comments:** Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

# Definitions

**Project Number:** WMWGASG\_1381

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

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.





# Chain of Custody

## Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
	Collector: TJ Daugherty		Requested By: Greg Dyer
		Location	Gaston Gypsum

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

Comments: Time for MW-7 corrected to 14:03 JBD

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	08/16/2022	10:45	6	Groundwater		BC15558
MW-5 Dup	08/16/2022	10:45	6	Sample Duplicate		BC15559
MW-6	08/16/2022	11:55	6	Groundwater		BC15560
MW-7	08/16/2022	14:03	6	Groundwater		BC15561
MW-8	08/16/2022	15:33	6	Groundwater		BC15562
FB-1	08/16/2022	16:00	5	Field Blank		BC15563
MW-9	08/17/2022	10:15	6	Groundwater		BC15564
MW-10	08/17/2022	11:00	6	Groundwater		BC15565
MW-11	08/17/2022	11:55	6	Groundwater		BC15566
EB-1	08/17/2022	12:15	5	Equipment Blank		BC15567

Relinquished By	Received By	Date/Time
		08/18/2022 08:25

SmarTroll ID	7455-41446-5-5	All pH requirements have been met <input checked="" type="checkbox"/>
Turbidity ID	4677-23343-4-2	
Sample Event	1381	
Cooler Temp	1.4°C	
Thermometer ID	7044-38282-2-2	
pH Strip ID	10275-59506-10-2	

Bottles/Pre-Preserved Bottles are provided by the GTL.  
 Total Metals and Alkalinity are not performed on Dissolved Sets  
 Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks



# 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
	Collector: Dallas Gentry		Requested By: Greg Dyer
		Location	Gaston Gypsum

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

Comments: MW-12 and MW-1 were not logged in due to collection error. They will be recollected. JBD

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2	08/16/2022	08:18	6	Groundwater		BC15551
MW-13	08/16/2022	09:35	6	Groundwater		BC15552
MW-13 dup	08/16/2022	09:35	6	Sample Duplicate		BC15553
MW-1	08/16/2022	11:04	6	Groundwater		
MW-15	08/16/2022	13:05	6	Groundwater		BC15554
MW-3	08/16/2022	14:55	6	Groundwater		BC15555
MW-14S	08/16/2022	16:03	6	Groundwater		BC15556
MW-12	08/17/2022	08:30	6	Groundwater		
FB-2	08/17/2022	08:50	5	Field Blank		BC15557

Relinquished By	Received By	Date/Time
<i>M. Dyer</i>	<i>R. Dyer</i>	08/18/2022 08:26

SmarTroll ID	7586-41444-5-3	All pH requirements have been met <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	
Sample Event	1381	
Cooler Temp	1.4°C	
Thermometer ID	7044-38282-2-2	
pH Strip ID	10275-59506-10-2	

Bottles/Pre-Preserved Bottles are provided by the GTL  
 Total Metals and Alkalinity are not performed on Dissolved Sets  
 Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks









September 30, 2022

Brooke Caton  
Alabama Power  
744 Highway 87  
Calera, AL 35040

RE: Project: WMWGASG\_1381  
Pace Project No.: 30516426

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,



Skyler C. Richmond  
skyler.richmond@pacelabs.com  
(724)850-5600  
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power  
Renee Jernigan, Alabama Power



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: WMWGASG\_1381  
Pace Project No.: 30516426

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### **Pace Analytical Services Pennsylvania**

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 460198  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: WMWGASG\_1381

Pace Project No.: 30516426

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30516426001	BC15568 MW-2	Water	08/16/22 08:18	08/23/22 10:30
30516426002	BC15569 MW-13	Water	08/16/22 09:35	08/23/22 10:30
30516426003	BC15570 MW-13 DUP	Water	08/16/22 09:35	08/23/22 10:30
30516426004	BC15571 MW-15	Water	08/16/22 13:05	08/23/22 10:30
30516426005	BC15572 MW-3	Water	08/16/22 14:55	08/23/22 10:30
30516426006	BC15573 MW-14S	Water	08/16/22 16:03	08/23/22 10:30
30516426007	BC15574 FB-2	Water	08/17/22 08:50	08/23/22 10:30
30516426008	BC15575 MW-5	Water	08/16/22 10:45	08/23/22 10:30
30516426009	BC15576 MW-5 DUP	Water	08/16/22 10:45	08/23/22 10:30
30516426010	BC15577 MW-6	Water	08/16/22 11:55	08/23/22 10:30
30516426011	BC15578 MW-7	Water	08/16/22 14:03	08/23/22 10:30
30516426012	BC15579 MW-8	Water	08/16/22 15:33	08/23/22 10:30
30516426013	BC15580 FB-1	Water	08/16/22 16:00	08/23/22 10:30
30516426014	BC15581 MW-9	Water	08/17/22 10:15	08/23/22 10:30
30516426015	BC15582 MW-10	Water	08/17/22 11:00	08/23/22 10:30
30516426016	BC15583 MW-11	Water	08/17/22 11:55	08/23/22 10:30
30516426017	BC15584 EB-1	Water	08/17/22 12:15	08/23/22 10:30
30516426018	BC15656 MW-12	Water	08/18/22 10:16	08/23/22 10:30
30516426019	BC15657 MW-1	Water	08/18/22 11:12	08/23/22 10:30
30516426020	BC15577 MW-6 MS	Water	08/16/22 11:55	08/23/22 10:30
30516426021	BC15577 MW-6 MSD	Water	08/16/22 11:55	08/23/22 10:30

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: WMWGASG\_1381  
Pace Project No.: 30516426

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30516426001	BC15568 MW-2	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426002	BC15569 MW-13	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426003	BC15570 MW-13 DUP	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426004	BC15571 MW-15	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426005	BC15572 MW-3	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426006	BC15573 MW-14S	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426007	BC15574 FB-2	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426008	BC15575 MW-5	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426009	BC15576 MW-5 DUP	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426010	BC15577 MW-6	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426011	BC15578 MW-7	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426012	BC15579 MW-8	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426013	BC15580 FB-1	EPA 9315	RMS	1	PASI-PA

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: WMWGASG\_1381  
Pace Project No.: 30516426

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30516426014	BC15581 MW-9	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30516426015	BC15582 MW-10	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426016	BC15583 MW-11	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
30516426017	BC15584 EB-1	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30516426018	BC15656 MW-12	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30516426019	BC15657 MW-1	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
30516426020	BC15577 MW-6 MS	EPA 9320	VAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30516426021	BC15577 MW-6 MSD	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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## PROJECT NARRATIVE

Project: WMWGASG\_1381  
Pace Project No.: 30516426

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**Method:** EPA 9315  
**Description:** 9315 Total Radium  
**Client:** Alabama Power  
**Date:** September 30, 2022

**General Information:**

21 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: WMWGASG\_1381

Pace Project No.: 30516426

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**Method:** EPA 9320

**Description:** 9320 Radium 228

**Client:** Alabama Power

**Date:** September 30, 2022

**General Information:**

21 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: WMWGASG\_1381

Pace Project No.: 30516426

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**Method:** Total Radium Calculation

**Description:** Total Radium 228+226

**Client:** Alabama Power

**Date:** September 30, 2022

**General Information:**

19 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15568 MW-2**      **Lab ID: 30516426001**      Collected: 08/16/22 08:18      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0889U ± 0.155 (0.352)</b> <b>C:95% T:NA</b>	pCi/L	09/19/22 20:51	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.257U ± 0.329 (0.697)</b> <b>C:75% T:86%</b>	pCi/L	09/16/22 15:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.346U ± 0.484 (1.05)</b>	pCi/L	09/21/22 14:09	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15569 MW-13**      **Lab ID: 30516426002**      Collected: 08/16/22 09:35      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.109U ± 0.121 (0.227)</b> <b>C:96% T:NA</b>	pCi/L	09/19/22 20:50	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.871 ± 0.381 (0.576)</b> <b>C:73% T:91%</b>	pCi/L	09/16/22 15:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.980 ± 0.502 (0.803)</b>	pCi/L	09/21/22 14:09	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15570 MW-13 DUP**      **Lab ID: 30516426003**      Collected: 08/16/22 09:35      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0529U ± 0.135 (0.326)</b> <b>C:94% T:NA</b>	pCi/L	09/19/22 20:59	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.784 ± 0.412 (0.714)</b> <b>C:68% T:92%</b>	pCi/L	09/16/22 15:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.837U ± 0.547 (1.04)</b>	pCi/L	09/21/22 14:09	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15571 MW-15**      **Lab ID: 30516426004**      Collected: 08/16/22 13:05      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.177U ± 0.157 (0.284)</b> <b>C:95% T:NA</b>	pCi/L	09/21/22 09:38	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.526U ± 0.371 (0.710)</b> <b>C:72% T:93%</b>	pCi/L	09/16/22 15:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.703U ± 0.528 (0.994)</b>	pCi/L	09/22/22 15:34	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15572 MW-3**      **Lab ID: 30516426005**      Collected: 08/16/22 14:55      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.297U ± 0.195 (0.297)</b> <b>C:90% T:NA</b>	pCi/L	09/21/22 09:38	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.580U ± 0.383 (0.720)</b> <b>C:68% T:98%</b>	pCi/L	09/16/22 15:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.877U ± 0.578 (1.02)</b>	pCi/L	09/22/22 15:34	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15573 MW-14S**      **Lab ID: 30516426006**      Collected: 08/16/22 16:03      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.172U ± 0.180 (0.360)</b> <b>C:92% T:NA</b>	pCi/L	09/21/22 09:38	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.581U ± 0.424 (0.819)</b> <b>C:64% T:89%</b>	pCi/L	09/16/22 15:51	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.753U ± 0.604 (1.18)</b>	pCi/L	09/22/22 15:34	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BC15574 FB-2</b> <b>Lab ID: 30516426007</b> Collected: 08/17/22 08:50      Received: 08/23/22 10:30      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0794U ± 0.127 (0.281)</b> <b>C:93% T:NA</b>	pCi/L	09/21/22 09:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.263U ± 0.348 (0.741)</b> <b>C:71% T:98%</b>	pCi/L	09/16/22 15:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.342U ± 0.475 (1.02)</b>	pCi/L	09/22/22 15:34	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15575 MW-5**      **Lab ID: 30516426008**      Collected: 08/16/22 10:45      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.106U ± 0.153 (0.330)</b> <b>C:90% T:NA</b>	pCi/L	09/21/22 09:38	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.628U ± 0.417 (0.784)</b> <b>C:65% T:90%</b>	pCi/L	09/16/22 15:51	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.734U ± 0.570 (1.11)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15576 MW-5 DUP**      **Lab ID: 30516426009**      Collected: 08/16/22 10:45      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.226U ± 0.206 (0.395)</b> <b>C:90% T:NA</b>	pCi/L	09/21/22 09:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.580U ± 0.379 (0.703)</b> <b>C:69% T:88%</b>	pCi/L	09/16/22 15:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.806U ± 0.585 (1.10)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BC15577 MW-6</b> <b>Lab ID: 30516426010</b> Collected: 08/16/22 11:55      Received: 08/23/22 10:30      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.236U ± 0.245 (0.487)</b> <b>C:95% T:NA</b>	pCi/L	09/21/22 09:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.827U ± 0.716 (1.45)</b> <b>C:71% T:81%</b>	pCi/L	09/13/22 16:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.06U ± 0.961 (1.94)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15578 MW-7**      **Lab ID: 30516426011**      Collected: 08/16/22 14:03      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.00373U ± 0.113 (0.315)</b> <b>C:90% T:NA</b>	pCi/L	09/21/22 09:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.537U ± 0.356 (0.662)</b> <b>C:72% T:90%</b>	pCi/L	09/16/22 15:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.537U ± 0.469 (0.977)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15579 MW-8**      **Lab ID: 30516426012**      Collected: 08/16/22 15:33      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.148U ± 0.191 (0.407)</b> <b>C:94% T:NA</b>	pCi/L	09/21/22 08:58	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.632U ± 0.429 (0.814)</b> <b>C:71% T:83%</b>	pCi/L	09/16/22 15:51	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.780U ± 0.620 (1.22)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15580 FB-1**      **Lab ID: 30516426013**      Collected: 08/16/22 16:00      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0174U ± 0.131 (0.344)</b> <b>C:94% T:NA</b>	pCi/L	09/21/22 08:26	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.622U ± 0.406 (0.773)</b> <b>C:74% T:93%</b>	pCi/L	09/16/22 15:51	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.639U ± 0.537 (1.12)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15581 MW-9**      **Lab ID: 30516426014**      Collected: 08/17/22 10:15      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0257U ± 0.0928 (0.243)</b> <b>C:95% T:NA</b>	pCi/L	09/21/22 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.22 ± 0.521 (0.828)</b> <b>C:64% T:89%</b>	pCi/L	09/16/22 15:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.25 ± 0.614 (1.07)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BC15582 MW-10</b> <b>Lab ID: 30516426015</b> Collected: 08/17/22 11:00      Received: 08/23/22 10:30      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0929U ± 0.200 (0.466)</b> <b>C:92% T:NA</b>	pCi/L	09/21/22 08:29	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.841 ± 0.418 (0.705)</b> <b>C:69% T:91%</b>	pCi/L	09/16/22 15:51	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.934U ± 0.618 (1.17)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15583 MW-11**      **Lab ID: 30516426016**      Collected: 08/17/22 11:55      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.181U ± 0.206 (0.423)</b> <b>C:96% T:NA</b>	pCi/L	09/21/22 08:30	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.149U ± 0.318 (0.704)</b> <b>C:71% T:96%</b>	pCi/L	09/16/22 15:50	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.330U ± 0.524 (1.13)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15584 EB-1**      **Lab ID: 30516426017**      Collected: 08/17/22 12:15      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0107U ± 0.105 (0.286)</b> <b>C:90% T:NA</b>	pCi/L	09/21/22 08:42	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.169U ± 0.338 (0.746)</b> <b>C:70% T:95%</b>	pCi/L	09/16/22 15:50	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.180U ± 0.443 (1.03)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15656 MW-12**      **Lab ID: 30516426018**      Collected: 08/18/22 10:16      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0787U ± 0.133 (0.297)</b> <b>C:89% T:NA</b>	pCi/L	09/21/22 11:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.528U ± 0.353 (0.650)</b> <b>C:67% T:89%</b>	pCi/L	09/16/22 15:50	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.607U ± 0.486 (0.947)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15657 MW-1**      **Lab ID: 30516426019**      Collected: 08/18/22 11:12      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.747 ± 0.281 (0.299)</b> <b>C:93% T:NA</b>	pCi/L	09/21/22 11:23	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.228U ± 0.300 (0.637)</b> <b>C:69% T:95%</b>	pCi/L	09/16/22 15:50	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.975 ± 0.581 (0.936)</b>	pCi/L	09/22/22 15:34	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15577 MW-6 MS**      **Lab ID: 30516426020**      Collected: 08/16/22 11:55      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>103.69 %REC ± NA (NA)</b> <b>C:NA T:NA</b>	pCi/L	09/21/22 15:01	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>85.36 %REC ± NA (NA)</b> <b>C:NA T:NA</b>	pCi/L	09/13/22 16:09	15262-20-1	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

**Sample: BC15577 MW-6 MSD**      **Lab ID: 30516426021**      Collected: 08/16/22 11:55      Received: 08/23/22 10:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>109.23 %REC 5.21RPD ±</b> <b>NA (NA)</b> <b>C:NA T:NA</b>	pCi/L	09/21/22 15:01	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>82.84 %REC 2.99 RPD ±</b> <b>NA (NA)</b> <b>C:NA T:NA</b>	pCi/L	09/13/22 16:09	15262-20-1	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

QC Batch: 530231

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30516426010, 30516426020, 30516426021

METHOD BLANK: 2572179

Matrix: Water

Associated Lab Samples: 30516426010, 30516426020, 30516426021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.284 ± 0.356 (0.756) C:78% T:91%	pCi/L	09/13/22 16:45	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

QC Batch: 530310

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30516426001, 30516426002, 30516426003

METHOD BLANK: 2572301

Matrix: Water

Associated Lab Samples: 30516426001, 30516426002, 30516426003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00826 ± 0.153 (0.424) C:91% T:NA	pCi/L	09/20/22 09:35	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGASG\_1381

Pace Project No.: 30516426

QC Batch: 530327

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30516426004, 30516426005, 30516426006, 30516426007, 30516426008, 30516426009, 30516426010, 30516426011, 30516426012, 30516426013, 30516426014, 30516426015, 30516426016, 30516426017, 30516426018, 30516426019, 30516426020, 30516426021

METHOD BLANK: 2572341

Matrix: Water

Associated Lab Samples: 30516426004, 30516426005, 30516426006, 30516426007, 30516426008, 30516426009, 30516426010, 30516426011, 30516426012, 30516426013, 30516426014, 30516426015, 30516426016, 30516426017, 30516426018, 30516426019, 30516426020, 30516426021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0366 ± 0.156 (0.402) C:95% T:NA	pCi/L	09/21/22 09:38	

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## QUALIFIERS

Project: WMWGASG\_1381

Pace Project No.: 30516426

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### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: WMWGASG\_1381  
Pace Project No.: 30516426

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30516426001	BC15568 MW-2	EPA 9315	530310		
30516426002	BC15569 MW-13	EPA 9315	530310		
30516426003	BC15570 MW-13 DUP	EPA 9315	530310		
30516426004	BC15571 MW-15	EPA 9315	530327		
30516426005	BC15572 MW-3	EPA 9315	530327		
30516426006	BC15573 MW-14S	EPA 9315	530327		
30516426007	BC15574 FB-2	EPA 9315	530327		
30516426008	BC15575 MW-5	EPA 9315	530327		
30516426009	BC15576 MW-5 DUP	EPA 9315	530327		
30516426010	BC15577 MW-6	EPA 9315	530327		
30516426011	BC15578 MW-7	EPA 9315	530327		
30516426012	BC15579 MW-8	EPA 9315	530327		
30516426013	BC15580 FB-1	EPA 9315	530327		
30516426014	BC15581 MW-9	EPA 9315	530327		
30516426015	BC15582 MW-10	EPA 9315	530327		
30516426016	BC15583 MW-11	EPA 9315	530327		
30516426017	BC15584 EB-1	EPA 9315	530327		
30516426018	BC15656 MW-12	EPA 9315	530327		
30516426019	BC15657 MW-1	EPA 9315	530327		
30516426020	BC15577 MW-6 MS	EPA 9315	530327		
30516426021	BC15577 MW-6 MSD	EPA 9315	530327		
30516426001	BC15568 MW-2	EPA 9320	529428		
30516426002	BC15569 MW-13	EPA 9320	529428		
30516426003	BC15570 MW-13 DUP	EPA 9320	529428		
30516426004	BC15571 MW-15	EPA 9320	529428		
30516426005	BC15572 MW-3	EPA 9320	529428		
30516426006	BC15573 MW-14S	EPA 9320	529428		
30516426007	BC15574 FB-2	EPA 9320	529428		
30516426008	BC15575 MW-5	EPA 9320	529428		
30516426009	BC15576 MW-5 DUP	EPA 9320	529428		
30516426010	BC15577 MW-6	EPA 9320	530231		
30516426011	BC15578 MW-7	EPA 9320	529428		
30516426012	BC15579 MW-8	EPA 9320	529428		
30516426013	BC15580 FB-1	EPA 9320	529428		
30516426014	BC15581 MW-9	EPA 9320	529428		
30516426015	BC15582 MW-10	EPA 9320	529428		
30516426016	BC15583 MW-11	EPA 9320	529428		
30516426017	BC15584 EB-1	EPA 9320	529428		
30516426018	BC15656 MW-12	EPA 9320	529428		
30516426019	BC15657 MW-1	EPA 9320	529428		
30516426020	BC15577 MW-6 MS	EPA 9320	530231		
30516426021	BC15577 MW-6 MSD	EPA 9320	530231		
30516426001	BC15568 MW-2	Total Radium Calculation	534400		
30516426002	BC15569 MW-13	Total Radium Calculation	534400		
30516426003	BC15570 MW-13 DUP	Total Radium Calculation	534400		

**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGASG\_1381  
Pace Project No.: 30516426

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30516426004	BC15571 MW-15	Total Radium Calculation	534787		
30516426005	BC15572 MW-3	Total Radium Calculation	534787		
30516426006	BC15573 MW-14S	Total Radium Calculation	534787		
30516426007	BC15574 FB-2	Total Radium Calculation	534787		
30516426008	BC15575 MW-5	Total Radium Calculation	534787		
30516426009	BC15576 MW-5 DUP	Total Radium Calculation	534787		
30516426010	BC15577 MW-6	Total Radium Calculation	534787		
30516426011	BC15578 MW-7	Total Radium Calculation	534787		
30516426012	BC15579 MW-8	Total Radium Calculation	534787		
30516426013	BC15580 FB-1	Total Radium Calculation	534787		
30516426014	BC15581 MW-9	Total Radium Calculation	534787		
30516426015	BC15582 MW-10	Total Radium Calculation	534787		
30516426016	BC15583 MW-11	Total Radium Calculation	534787		
30516426017	BC15584 EB-1	Total Radium Calculation	534787		
30516426018	BC15656 MW-12	Total Radium Calculation	534787		
30516426019	BC15657 MW-1	Total Radium Calculation	534787		

### REPORT OF LABORATORY ANALYSIS

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WO#: 30516426

PM: SCR Due Date: 09/14/22  
 CLIENT: ALABAMA PWR

**CHAIN-OF-CUSTODY / Analytical Request Document**  
 The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

<b>Section A</b>		<b>Section B</b>		<b>Section C</b>	
<b>Required Client Information:</b>		<b>Required Project Information:</b>		<b>Invoice Information:</b>	
Company: Alabama Power Company	Report To: Renee Jernigan	Company Name: Alabama Power Co.	Attention: Renee Jernigan	State / Location: AL	Page: 2 Of 2
Address: 744 Highway 87 GSC Bldg #8	Copy To: Brooke Caton & Blaine Denton	Address: 744 Highway 87 GSC Bldg #8	Company Name: Alabama Power Co.	City: Skylar Richmond	
Calera, AL 35040		Address: CCR	Address: 744 Highway 87 GSC Bldg #8	State / Location: AL	
Email To: rgamer@southernco.com	Purchase Order #: APC10755638	Address: CCR	Address: 744 Highway 87 GSC Bldg #8	City: Skylar Richmond	
Phone: 205-664-6247   Fax:	Project Name: Plant Gaston Gypsum Storage Area	Address: CCR	Address: 744 Highway 87 GSC Bldg #8	City: Skylar Richmond	
Requested Due Date: 28 days	Project Number: WMMGASG-1381	Address: CCR	Address: 744 Highway 87 GSC Bldg #8	City: Skylar Richmond	
		Address: CCR	Address: 744 Highway 87 GSC Bldg #8	City: Skylar Richmond	
		Address: CCR	Address: 744 Highway 87 GSC Bldg #8	City: Skylar Richmond	

#	ITEM	Description	Station Name Location_ID	Site Name Facility_ID	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives	Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	Requested Analyte (Y/N)
									DATE	TIME								
1	BC15579	MW-8	APCO-GN-GSA-MW-8	APCO_Gaston_GypsumStore			GW G	G	8/16/2022	15:33	1			X	X			
2	BC15580	FB-1	APCO-GN-GSA-FB-1	APCO_Gaston_GypsumStore			GW G	G	8/16/2022	16:00	1			X	X			
3	BC15581	MW-9	APCO-GN-GSA-MW-9	APCO_Gaston_GypsumStore			GW G	G	8/17/2022	10:15	1			X	X			
4	BC15582	MW-10	APCO-GN-GSA-MW-10	APCO_Gaston_GypsumStore			GW G	G	8/17/2022	11:00	1			X	X			
5	BC15583	MW-11	APCO-GN-GSA-MW-11	APCO_Gaston_GypsumStore			GW G	G	8/17/2022	11:55	1			X	X			
6	BC15584	EB-1	APCO-GN-GSA-EB-1	APCO_Gaston_GypsumStore			GW G	G	8/17/2022	12:15	1			X	X			
7	BC15586	MW-12	APCO-GN-GSA-MW-12	APCO_Gaston_GypsumStore			GW G	G	8/18/2022	10:16	1			X	X			
8	BC15657	MW-1	APCO-GN-GSA-MW-1	APCO_Gaston_GypsumStore			GW G	G	8/18/2022	11:12	1			X	X			
9																		
10																		
11																		
12																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP IN C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples (Y/N)	Intact (Y/N)
	Renee Jernigan/ APC GTL	8/19/2022	9:05	Sam Pace	8/23/2022	10:50							

**SAMPLER NAME AND SIGNATURE**  
 PRINT Name of SAMPLER: Dallas Gentry/TJ Daugherty  
 SIGNATURE of SAMPLER: DATE Signed:





Pace Greensburg Lab -Sample Container Count

Profile Number 16788

1/2

Client

Site Plant Gaston Gypsum

Notes

Please pay attention to bottle counts!

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WG9U	WGKU	ZPLC
1	WT											←																
2												←																
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

**WO# : 30516426**  
 PM: SCR Due Date: 09/14/22  
 CLIENT: ALABAMA PWR

Container Codes

Glass	
GJN	1 Gallon Jug with HNO3
AG5U	100mL amber glass unprservd
AG5T	100mL amber glass Na Thiosulfate
GJN	1 Gallon Jug
AG1S	1L amber glass H2SO4
AG1H	1L amber glass HCl
AG1T	1L amber glass Na Thiosulfate
BG1U	1L clear glass unprservd
AG3S	250mL amber glass H2SO4
AG3U	250mL amber glass unprservd
DG9S	40mL amber VOA vial H2SO4
VG9U	40mL clear VOA vial
VG9T	40mL clear VOA vial Na Thiosulfate
VG9H	40mL clear VOA vial HCl
JGFU	4oz amber wide jar
WG9U	4oz wide jar unprservd
BG2U	500mL clear glass unprservd
AG2U	500mL amber glass unprservd
WGKU	8oz wide jar unprservd

Plastic / Misc.	
GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unprservd
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unprservd
BP3C	250ml plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unprservd
EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag
WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe



Pace Greensburg Lab -Sample Container Count

Profile Number 167588

Client

Site Plant Gaston Gypsum

Notes

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WG9U	WGKU	ZPLC
1	WT																											
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

**WO#: 30516426**  
 PM: SCR  
 Due Date: 09/14/22  
 CLIENT: ALABAMA PWR

Container Codes

Glass	
GJN	1 Gallon Jug with HNO3
AG5U	100mL amber glass unpreserved
AG5T	100mL amber glass Na Thiosulfate
GJN	1 Gallon Jug
AG1S	1L amber glass H2SO4
AG1H	1L amber glass HCl
AG1T	1L amber glass Na Thiosulfate
BG1U	1L clear glass unpreserved
AG3S	250mL amber glass H2SO4
AG3U	250mL amber glass unpreserved
DG9S	40mL amber VOA vial H2SO4
VG9U	40mL clear VOA vial
VG9T	40mL clear VOA vial Na Thiosulfate
VG9H	40mL clear VOA vial HCl
JGFU	4oz amber wide jar
WG9U	4oz wide jar unpreserved
BG2U	500mL clear glass unpreserved
AG2U	500mL amber glass unpreserved
WGKU	8oz wide jar unpreserved

Plastic / Misc.	
GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250ml plastic NaOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wiper/Swab
ZPLC	Ziploc Bag

WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe

# Quality Control Sample Performance Assessment



**Analyst Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226  
 Analyst: RMS  
 Date: 9/8/2022  
 Worklist: 68698  
 Matrix: DW

Method Blank Assessment	
MB Sample ID	2572301
MB Concentration:	0.008
MB Counting Uncertainty:	0.153
MB MDC:	0.424
MB Numerical Performance Indicator:	0.11
MB Status vs. MDC:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		Y
Count Date:	LCS D68698	9/19/2022
Spike I.D.:	19-033	24.024
Decay Corrected Spike Concentration (pCi/mL):	0.10	0.10
Volume Used (mL):	0.201	0.200
Aliquot Volume (L, g, F):	11.965	12.006
Target Conc. (pCi/L, g, F):	0.144	0.144
Uncertainty (Calculated):	13.428	13.119
Result (pCi/L, g, F):	1.279	1.252
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	2.23	1.73
Numerical Performance Indicator:	112.23%	109.27%
Percent Recovery:	N/A	N/A
Status vs Numerical Indicator:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment	
Sample I.D.:	30515389061
Duplicate Sample I.D.:	30515389061DUP
Sample Result (pCi/L, g, F):	0.502
Duplicate Result (pCi/L, g, F):	0.336
Sample Duplicate Result (pCi/L, g, F):	0.233
Duplicate Duplicate Result (pCi/L, g, F):	0.284
Are sample and/or duplicate results below RL?	See Below ##
Duplicate Numerical Performance Indicator:	1.200
Duplicate Percent Recoveries:	73.28%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail***
% RPD Limit:	25%

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/9/2022		
Sample I.D.:	30515389073		
Sample MS I.D.:	30515389074		
Sample MSD I.D.:	30515389075		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	19-033		
Spike Volume Used in MS (mL):	24.025		
Spike Volume Used in MSD (mL):	0.20		
MS Aliquot (L, g, F):	0.288		
MS Target Conc. (pCi/L, g, F):	16.704		
MSD Aliquot (L, g, F):	0.315		
MSD Target Conc. (pCi/L, g, F):	15.239		
MS Spike Uncertainty (calculated):	0.200		
MSD Spike Uncertainty (calculated):	0.183		
Sample Result:	0.019		
Sample Result Counting Uncertainty (pCi/L, g, F):	0.124		
Sample Matrix Spike Result:	18.966		
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	1.328		
Sample Matrix Spike Duplicate Result:	14.958		
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	1.096		
MS Numerical Performance Indicator:	3.260		
MSD Numerical Performance Indicator:	-0.526		
MS Percent Recovery:	113.43%		
MSD Percent Recovery:	98.03%		
MS Status vs Numerical Indicator:	N/A		
MSD Status vs Numerical Indicator:	N/A		
MS Status vs Recovery:	Pass		
MSD Status vs Recovery:	Pass		
MS/MSD Upper % Recovery Limits:	125%		
MS/MSD Lower % Recovery Limits:	75%		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30515389073
Sample MS I.D.:	30515389074
Sample MSD I.D.:	30515389075
Matrix Spike Result:	18.966
Matrix Spike Duplicate Result:	14.958
Duplicate Numerical Performance Indicator:	4.561
Duplicate Percent Recoveries:	14.56%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

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

Comments:

*Omega*  
 \*\*\*Batch must be re-assessing due to unacceptable precision N/A  
 VAM  
 9/20/22



# Quality Control Sample Performance Assessment



*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-228  
Analyst: VAL  
Date: 9/1/2022  
Worklist: 68608  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2568106
MB concentration:	0.644
MB 2 Sigma CSU:	0.374
MB MDC:	0.680
MB Numerical Performance Indicator:	3.38
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSD (Y or N)?	Y
Count Date:	9/16/2022
Spike I.D.:	LCSD68608
Decay Corrected Spike Concentration (pCi/mL):	22-016
Volume Used (mL):	34.308
Aliquot Volume (L, g, F):	0.10
Target Conc. (pCi/L, g, F):	0.805
Uncertainty (Calculated):	4.260
Result (pCi/L, g, F):	0.209
LCSD/LCSD 2 Sigma CSU (pCi/L, g, F):	3.928
Numerical Performance Indicator:	0.970
Percent Recovery:	-0.66
Status vs Numerical Indicator:	92.20%
Upper % Recovery Limits:	N/A
Lower % Recovery Limits:	Pass
	135%
	60%

Duplicate Sample Assessment	
Sample I.D.:	LCSD68608
Duplicate Sample I.D.:	LCSD68608
Sample Result (pCi/L, g, F):	4.324
Sample Duplicate Result (pCi/L, g, F):	1.005
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.928
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.970
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	0.555
(Based on the LCSD/LCSD Percent Recoveries) Duplicate RPD:	9.70%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	38%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample I.D. Sample MS I.D. Sample MSD I.D. Spike I.D.: MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated):		
Sample Result: Sample Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D. Sample MS I.D. Sample MSD I.D. Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:

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

Comments:

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

*MB activity < MDC, Pass*  
*Aug 21/22*

*vam 9/19/22*

*08/19/22*

# Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226  
Analyst: RMS  
Date: 9/6/2022  
Worklist: 68699  
Matrix: DW

Method Blank Assessment	
MB Sample ID	2572341
MB concentration:	0.037
M/B Counting Uncertainty:	0.156
MB MDC:	0.402
MB Numerical Performance Indicator:	0.46
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCS D (Y or N)?	Y
Count Date:	9/21/2022	LCS D68699	19-033
Spike I.D.:	19-033		19-033
Decay Corrected Spike Concentration (pCi/mL):	24.023		24.023
Volume Used (mL):	0.10		0.10
Aliquot Volume (L, g, F):	0.200		0.202
Target Conc. (pCi/L, g, F):	12.006		11.871
Uncertainty (Calculated):	0.144		0.142
Result (pCi/L, g, F):	12.367		13.014
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.155		1.221
Numerical Performance Indicator:	0.61		1.82
Percent Recovery:	103.01%		109.63%
Status vs Numerical Indicator:	N/A		N/A
Status vs Recovery:	Pass		Pass
Upper % Recovery Limits:	125%		125%
Lower % Recovery Limits:	75%		75%

Duplicate Sample Assessment		LCS D (Y or N)?	Y
Sample I.D.:	30516426010		
Duplicate Sample I.D.:	30516426010DUP		
Sample Result (pCi/L, g, F):	12.367		0.236
Sample Result Counting Uncertainty (pCi/L, g, F):	1.155		0.243
Sample Duplicate Result (pCi/L, g, F):	13.014		0.280
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.221		0.247
Are sample and/or duplicate results below RL?	NO		See Below ##
Duplicate Numerical Performance Indicator:	-0.754		-0.251
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.23%		17.22%
Duplicate Status vs Numerical Indicator:	N/A		N/A
Duplicate Status vs RPD:	Pass		Pass
% RPD Limit:	25%		25%

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

Comments:

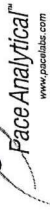
*Signature*

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/16/2022		
Sample I.D.:	30516426010		
Sample MS I.D.:	30516426020		
Sample MSD I.D.:	30516426021		
Spike I.D.:	19-033		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.025		
Spike Volume Used in MS (mL):	0.20		
Spike Volume Used in MSD (mL):	0.20		
MS Aliquot (L, g, F):	0.203		
MS Target Conc. (pCi/L, g, F):	23.645		
MSD Aliquot (L, g, F):	0.201		
MSD Target Conc. (pCi/L, g, F):	23.847		
MS Spike Uncertainty (calculated):	0.284		
MSD Spike Uncertainty (calculated):	0.286		
Sample Result:	0.236		
Sample Result Counting Uncertainty (pCi/L, g, F):	0.243		
Sample Matrix Spike Result:	24.752		
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	1.649		
Sample Matrix Spike Duplicate Result:	26.283		
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	1.698		
MS Numerical Performance Indicator:	1.010		
MSD Numerical Performance Indicator:	2.480		
MS Percent Recovery:	103.69%		
MSD Percent Recovery:	109.23%		
MS Status vs Numerical Indicator:	N/A		
MSD Status vs Numerical Indicator:	N/A		
MS Status vs Recovery:	Pass		
MSD Status vs Recovery:	Pass		
MS/MSD Upper % Recovery Limits:	125%		
MS/MSD Lower % Recovery Limits:	75%		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30516426010
Sample MS I.D.:	30516426020
Sample MSD I.D.:	30516426021
Matrix Spike Result:	24.752
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.649
Sample Matrix Spike Duplicate Result:	26.283
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	1.698
Duplicate Numerical Performance Indicator:	-1.267
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	5.21%
MS/MSD Duplicate Status vs Numerical Indicator:	N/A
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

VAM9/22/22

# Quality Control Sample Performance Assessment



**Analyst Must Manually Enter All Fields Highlighted in Yellow**

Test: Ra-228  
Analyst: VAL  
Date: 9/7/2022  
Worklist: 68670  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2572179
MB concentration:	0.284
M/B 2 Sigma CSU:	0.356
MB MDC:	0.756
MB Numerical Performance Indicator:	1.56
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment		LCS (Y or N)?	N
Count Date:		LCS68670	LCS68670
Spike I.D.:		9/13/2022	
Decay Corrected Spike Concentration (pCi/mL):		22-016	
Volume Used (mL):		34.342	
Aliquot Volume (L, g, F):		0.10	
Target Conc. (pCi/L, g, F):		0.800	
Uncertainty (Calculated):		4.291	
Result (pCi/L, g, F):		0.210	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):		3.620	
Numerical Performance Indicator:		0.852	
Percent Recovery:		-1.50	
Status vs Numerical Indicator:		84.37%	
Upper % Recovery Limits:		N/A	
Lower % Recovery Limits:		Pass	
		135%	
		60%	

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

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

Comments:

*Phyllis*

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/16/2022	
Sample I.D.:	30516426010	
Sample MS I.D.:	30516426020	
Sample MSD I.D.:	30516426021	
Spike I.D.:	22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	34.663	
Spike Volume Used in MS (mL):	0.10	
MS Aliquot (L, g, F):	0.10	
MS Target Conc. (pCi/L, g, F):	0.804	
MSD Aliquot (L, g, F):	4.311	
MSD Target Conc. (pCi/L, g, F):	0.802	
MSD Target Conc. (pCi/L, g, F):	4.321	
MS Spike Uncertainty (calculated):	0.211	
MSD Spike Uncertainty (calculated):	0.212	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.827	
Sample Matrix Spike Result:	0.716	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.507	
Sample Matrix Spike Duplicate Result:	1.174	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	4.407	
MS Numerical Performance Indicator:	1.190	
MSD Numerical Performance Indicator:	-0.889	
MS Percent Recovery:	85.36%	
MSD Percent Recovery:	82.84%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30516426010
Sample MS I.D.:	30516426020
Sample MSD I.D.:	30516426021
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.507
Sample Matrix Spike Duplicate Result:	1.174
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	4.407
Sample Matrix Spike Duplicate Duplicate Result:	1.190
Duplicate Numerical Performance Indicator:	0.117
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	2.99%
MS/MSD Duplicate Status vs Numerical Indicator:	Pass
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%



## Appendix D. Horizontal Groundwater Flow Velocity Calculations Plant Gaston Gypsum Pond

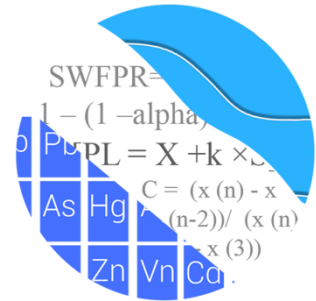
2022 First Semi-Annual Monitoring Event								
Date of Measurement	GN-GSA-MW-5	GN-GSA-MW-6	Distance	Hydraulic Gradient	Hydraulic Conductivity	Effective Porosity	Calculated Groundwater Flow Velocity	Calculated Groundwater Flow Velocity
	$h_1$ (ft)	$h_2$ (ft)	$\Delta l$ (ft)	$\Delta h/\Delta l$ (ft/ft)	$K$ (ft/d)	$n$	(ft/d)	(ft/yr)
<b>4/11/2022</b>	402.26	400.98	413.00	0.00310	0.42000	0.15	0.008678	3.17

2022 Second Semi-Annual Monitoring Event								
Date of Measurement	GN-GSA-MW-5	GN-GSA-MW-6	Distance	Hydraulic Gradient	Hydraulic Conductivity	Effective Porosity	Calculated Groundwater Flow Velocity	Calculated Groundwater Flow Velocity
	$h_1$ (ft)	$h_2$ (ft)	$\Delta l$ (ft)	$\Delta h/\Delta l$ (ft/ft)	$K$ (ft/d)	$n$	(ft/d)	(ft/yr)
<b>8/15/2022</b>	398.28	397.92	413.00	0.00087	0.42000	0.15	0.002441	0.89

Notes:

ft = feet; ft/d = feet per day; ft/ft = feet per foot; ft/yr = feet per year

# GROUNDWATER STATS CONSULTING



June 6, 2022

Southern Company Services  
Attn: Mr. Greg Dyer  
3535 Colonnade Parkway  
Birmingham, AL 35243

Re: Plant Gaston Gypsum Pond  
1<sup>st</sup> Semi-Annual Statistical Analysis – April 2022

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the April 2022 1<sup>st</sup> semi-annual sample event for Alabama Power Company's Plant Gaston Gypsum Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GN-GSA-MW-2, GN-GSA-MW-3, GN-GSA-MW-14S, and GN-GSA-MW-15
- **Downgradient wells:** GN-GSA-MW-1, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, and GN-GSA-MW-13
- **Delineation well:** GN-GSA-GS2-4

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The CCR program consists of the following constituents:

**Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS

**Appendix IV** (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. A substitution of the most recent reporting limit is used for non-detect data.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 9
- # Background Samples (Interwell): 72
- # Constituents: 7
- # Downgradient wells: 10

## Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for calcium, chloride, sulfate, and TDS
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, fluoride, and pH

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater

quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

### **Background Update Summary – Conducted in Fall 2021**

Intrawell prediction limits, which compare the most recent compliance sample from a given well to historical data from the same well, are updated by testing for the appropriateness of consolidating new sampling observations with the screened background data. The last background update was performed in Fall 2021. This process is described below and requires a minimum of four new data points. Historical data were evaluated for updating with newer data through April 2021 through the use of time series graphs to identify potential outliers when necessary, as well as with the Mann Whitney test for equality of medians. As discussed in the Statistical Analysis Plan (August 2020), intrawell prediction limits are used to evaluate calcium, chloride, sulfate, and TDS at all wells due to natural spatial variation in groundwater quality for these parameters.

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event after screening for new outliers. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend. Interwell prediction limits are used to evaluate boron, fluoride, and pH.

### Outlier Analysis

Prior to performing prediction limits, proposed background data through April 2021 were reviewed through visual screening to identify any newly suspected outliers at all wells for calcium, chloride sulfate, and TDS, and through October 2021 at upgradient wells for boron, fluoride, and pH. When identified, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective.

During the background screening, two historical high values for sulfate in well GN-GSA-MW-6 were flagged as outliers. While some records contained historical concentrations of sulfate that are slightly higher than present-day concentrations, no



adjustments were required to these records due to the overall low concentrations throughout the entire record. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of flagged values follows this letter (Figure C).

### Mann-Whitney Comparison of Medians

For constituents requiring intrawell prediction limits, the Mann Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through May 2019 to compliance data through April 2021. Previously truncated records which resulted from the previous update were evaluated by comparing only the truncated portion of the data set to the more recent measurements. When the medians of the two groups are not statistically significantly different at the 99% confidence level, background data sets are updated to include the newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

#### Increase:

- Calcium: GN-GSA-MW-1, GN-GSA-MW-10, and GN-GSA-MW-13
- Chloride: GN-GSA-MW-11
- Sulfate: GN-GSA-MW-5 and GN-GSA-MW-8
- TDS: GN-GSA-MW-5 and GN-GSA-MW-10

#### Decrease:

- Calcium: GN-GSA-MW-15 (upgradient)
- Chloride: GN-GSA-MW-14S (upgradient)
- Sulfate: GN-GSA-MW-3 (upgradient)

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data unless it can be reasonably justified that the change in concentrations reflects a naturally occurring shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

While the increasing median concentrations between the background and compliance data were slightly different for calcium in downgradient wells GN-GSA-MW-1, GN-GSA-MW-10, and GN-GSA-MWA-13, the majority of the reported measurements in more recent data are stable and similar to concentrations reported within each well's

respective background. Additionally, these concentrations are similar to those reported in at least one upgradient well. Therefore, these records were updated.

The statistically significant increasing differences identified at remaining downgradient wells by the Mann-Whitney test resulted from increases in median concentrations in more recent data. In order to maintain conservative (i.e., lower) statistical limits, the following well/constituent pairs were not updated during the screening:

- Calcium: GN-GSA-MW-5
- Chloride: GN-GSA-MW-11
- Sulfate: GN-GSA-MW-5 and GN-GSA-MW-8
- TDS: GN-GSA-MW-5 and GN-GSA-MW-10

Although not significant at the 99% confidence level, the increases in concentrations for calcium at well GN-GSA-MW-5 would lead to constructing statistical limits that would be difficult to detect any potential release from the facility. Therefore, the background data set for this well/constituent pair was not updated with compliance data.

The statistically significant decreasing differences identified at upgradient wells for calcium and chloride by the Mann-Whitney test resulted from slightly lower medians in more recent data compared to the medians of the historical data in these wells. These records, however, were updated since statistically significant decreases in medians between historical and compliance data sets signify lower concentrations and, subsequently, more conservative (i.e., lower) statistical limits. For sulfate in upgradient well GN-GSA-MW-3, however, more recent observations have stabilized at lower concentrations; therefore, the earlier portion of the record prior to February 2017 with higher concentrations was truncated to construct statistical limits that represent present-day groundwater quality. A list of well/constituent pairs using a truncated portion of their records follows this letter.

All records will be re-evaluated during the next background update. If future concentrations are similar to those observed currently, the earlier portion of the records may require deselection so only more recent data are used to construct statistical limits which are reflective of present-day water quality conditions. If, however, concentrations return to historical lower levels, more recent higher measurements may be flagged as outliers and deselected prior to construction of statistical limits

## Trend Analysis – Upgradient Wells

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. No statistically significant trends were identified except for a statistically significant decreasing trend for pH in upgradient well GN-GSA-MW-15. Since the magnitude of the trend is marginal compared to the concentrations, no adjustments were required. A summary of these results was submitted with the Fall 2021 report.

## **Evaluation of Appendix III Parameters – April 2022**

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Background data are re-evaluated when a minimum of 4 compliance samples are available.

Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

## Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for calcium, chloride, sulfate, and TDS using screened background data through April 2021 at each well (Figure D). The April 2022 sample at each well is compared to its respective intrawell prediction limit. A list of well/constituent pairs that use a truncated portion of their background data sets follow this report. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, fluoride, and pH using upgradient well data through April 2022 (Figure E).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter. Exceedances for both interwell and intrawell prediction limits were identified for the following well/constituent pairs:

Intrawell:

- Calcium: GN-GSA-MW-5, GN-GSA-MW-12, and GN-GSA-MW-14S (upgradient)
- Chloride: GN-GSA-MW-11
- Sulfate: GN-GSA-MW-5 and GN-GSA-MW-8
- TDS: GN-GSA-MW-5

Interwell:

- Fluoride: GN-GSA-MW-1
- pH: GN-GSA-MW-6

Trend Tests

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure F). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site, which represents natural variation in groundwater quality. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Calcium: GN-GSA-MW-5 and GN-GSA-MW-12
- Chloride: GN-GSA-MW-11
- Sulfate: GN-GSA-MW-5 and GN-GSA-MW-8
- TDS: GN-GSA-MW-5

Decreasing:

- Calcium: GN-GSA-MW-3 and GN-GSA-MW-15 (both upgradient)
- Chloride: GN-GSA-MW-3, GN-GSA-MW-14S, and GN-GSA-MW-15 (all upgradient)
- pH: GN-GSA-MW-3 and GN-GSA-MW-15 (both upgradient)
- Sulfate: GN-GSA-MW-3, GN-GSA-MW-14S, and GN-GSA-MW-15 (all upgradient)
- TDS: GN-GSA-MW-3 and GN-GSA-MW-15 (both upgradient)

### **Evaluation of Appendix IV Parameters – April 2022**

Data from all wells for Appendix IV parameters were reassessed for outliers during previous analyses. No changes to previously flagged outliers were made. A summary of previously flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management (ADEM), the Groundwater Protections Standards (GWPS) were updated during the 2021 2<sup>nd</sup> semi-annual statistical analysis. The GWPS will be updated again during the 2023 2<sup>nd</sup> semi-annual statistical analysis. The methodology used to create these GWPS is described below.

#### Interwell Upper Tolerance Limits

First, background limits were determined using upper tolerance limits (UTLs) constructed from pooled upgradient well data through October 2021 (Figure G). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed.

#### Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure H) in the confidence interval comparisons described below.

## Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through April 2022 for each of the Appendix IV parameters (Figure I). These intervals were either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits with 8 samples, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects.

As mentioned above, well/constituent pairs containing 100% non-detects for the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of deselected well/constituent pairs follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter. No confidence interval exceedances were noted except for barium in well GN-GSA-MW-1. Note that when the lower confidence limit (LCL) uses the same number of significant digits as the GWPS, that the LCL and GWPS for barium at well GN-GSA-MW-1 are equal.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gaston Gypsum Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

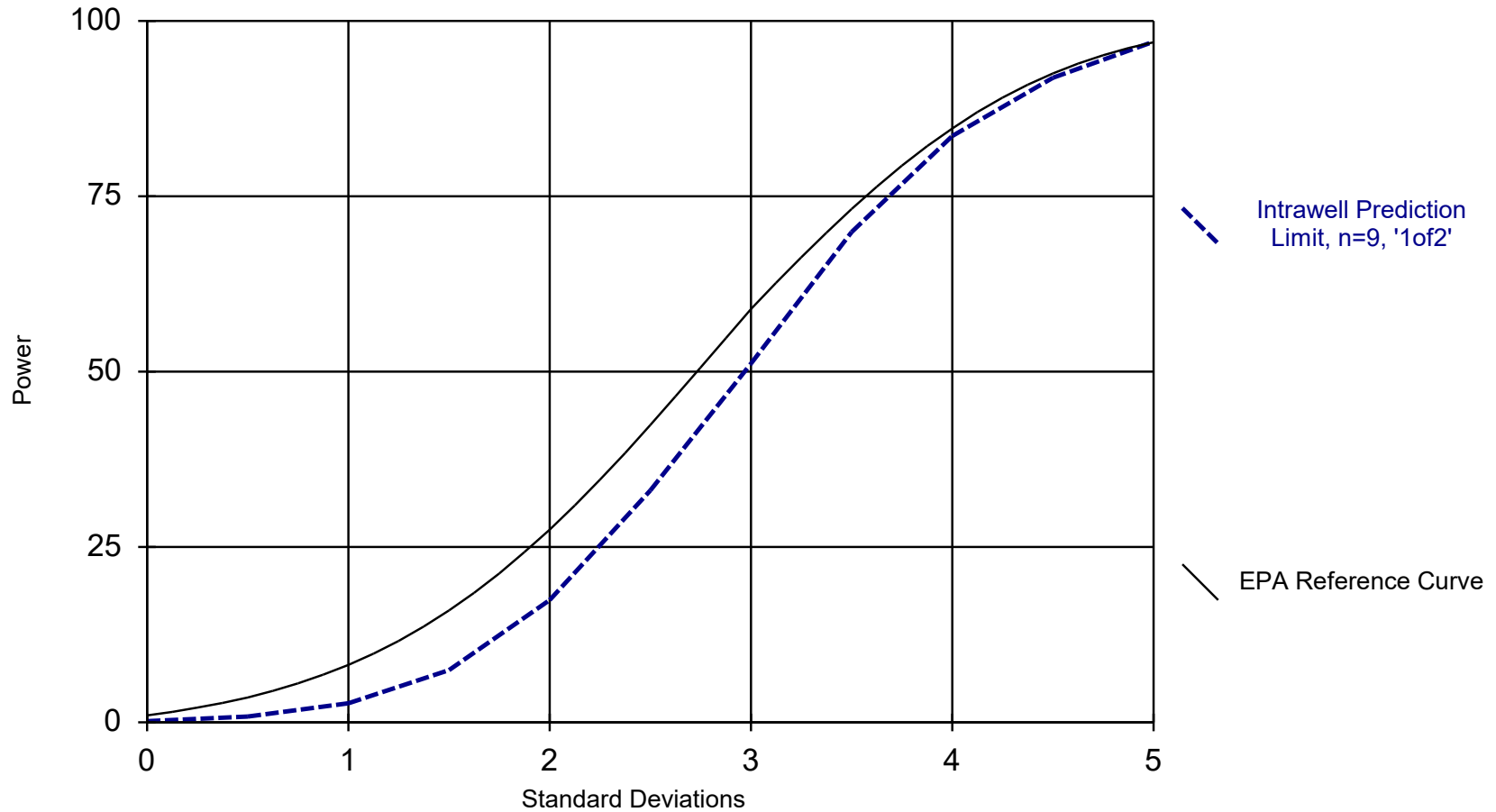


Andrew Collins  
Project Manager



Kristina Rayner  
Senior Statistician

### Intrawell Power Curve

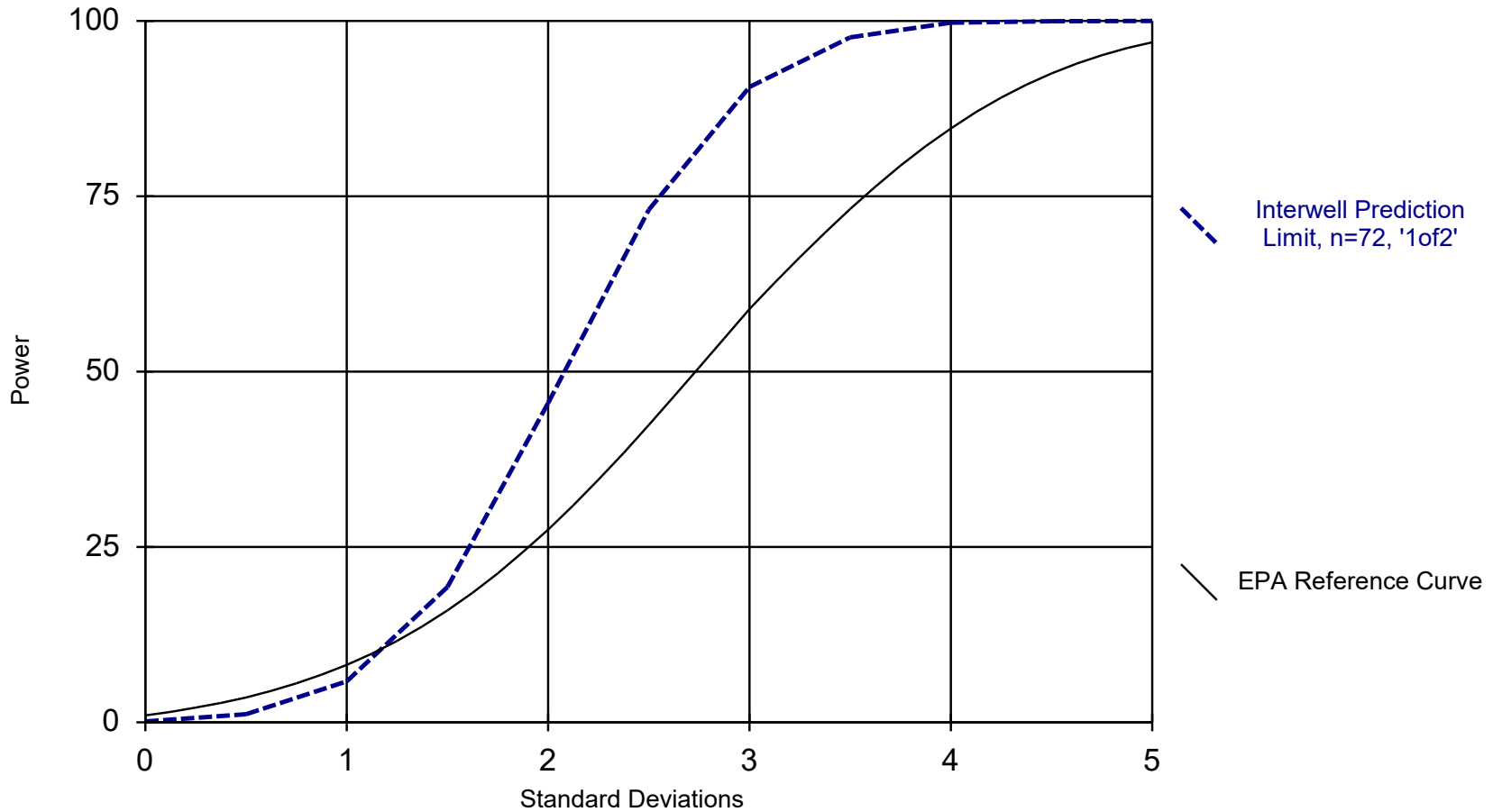


Kappa = 2.961, based on 10 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/31/2022 10:26 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

### Interwell Power Curve



Kappa = 1.994, based on 10 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/31/2022 10:27 AM

Plant Gaston Client: Southern Company Data: Gaston GSA



# 100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/31/2022 10:13 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Antimony (mg/L)

GN-GSA-MW-11

Beryllium (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Cadmium (mg/L)

GN-GSA-MW-1, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Cobalt (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10

Fluoride (mg/L)

GN-GSA-MW-11, GN-GSA-MW-6

Lead (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-12, GN-GSA-MW-5, GN-GSA-MW-7, GN-GSA-MW-8

Lithium (mg/L)

GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Mercury (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Molybdenum (mg/L)

GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-6

Selenium (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Thallium (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

# Intrawell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-12	85.67	n/a	4/13/2022	88	Yes	16	69.87	6.624	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-14S	57.44	n/a	4/13/2022	58.9	Yes	16	48.82	3.611	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-5	71.16	n/a	4/12/2022	94.1	Yes	12	54.73	6.323	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-11	7.709	n/a	4/13/2022	19.6	Yes	9	4.269	1.162	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-5	37.06	n/a	4/12/2022	145	Yes	9	15.51	7.278	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-8	2.935	n/a	4/12/2022	3.13	Yes	9	1.843	0.3686	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-5	295.1	n/a	4/12/2022	400	Yes	9	203.3	30.98	0	None	No	0.0007523	Param Intra 1 of 2

# Intrawell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-1	49.39	n/a	4/13/2022	47.5	No	16	39.03	4.343	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-10	108.2	n/a	4/13/2022	107	No	16	95.87	5.157	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-11	15.67	n/a	4/13/2022	15	No	16	10.74	2.063	0	None	No	0.0007523	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>85.67</b>	<b>n/a</b>	<b>4/13/2022</b>	<b>88</b>	<b>Yes</b>	<b>16</b>	<b>69.87</b>	<b>6.624</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	GN-GSA-MW-13	109.8	n/a	4/13/2022	91.8	No	16	88.63	8.857	0	None	No	0.0007523	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-14S</b>	<b>57.44</b>	<b>n/a</b>	<b>4/13/2022</b>	<b>58.9</b>	<b>Yes</b>	<b>16</b>	<b>48.82</b>	<b>3.611</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	GN-GSA-MW-15	11.1	n/a	4/12/2022	4.59	No	16	7.273	1.606	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-2	96.06	n/a	4/12/2022	87.1	No	16	81.49	6.104	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-3	125.5	n/a	4/12/2022	55.1	No	16	84.59	17.13	0	None	No	0.0007523	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>71.16</b>	<b>n/a</b>	<b>4/12/2022</b>	<b>94.1</b>	<b>Yes</b>	<b>12</b>	<b>54.73</b>	<b>6.323</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	GN-GSA-MW-6	1.491	n/a	4/12/2022	0.516	No	16	0.867	0.2613	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-7	76.85	n/a	4/12/2022	71.2	No	16	65.81	4.63	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-8	61.1	n/a	4/12/2022	54.4	No	16	55.91	2.177	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-9	67.34	n/a	4/12/2022	50.4	No	16	50.56	7.034	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-1	3.72	n/a	4/13/2022	2.17	No	16	2.492	0.5148	6.25	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-10	3.733	n/a	4/13/2022	2.77	No	16	7.867	2.545	6.25	None	x^2	0.0007523	Param Intra 1 of 2
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>7.709</b>	<b>n/a</b>	<b>4/13/2022</b>	<b>19.6</b>	<b>Yes</b>	<b>9</b>	<b>4.269</b>	<b>1.162</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Chloride (mg/L)	GN-GSA-MW-12	5.443	n/a	4/13/2022	3.76	No	16	3.16	0.9566	6.25	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-13	4.799	n/a	4/13/2022	3.01	No	16	3.594	0.5051	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-14S	5.899	n/a	4/13/2022	2.42	No	16	3.731	0.9087	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-15	4.314	n/a	4/12/2022	1.88	No	16	2.366	0.8163	6.25	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-2	4.633	n/a	4/12/2022	3.23	No	16	3.649	0.4125	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-3	3.779	n/a	4/12/2022	2.67	No	16	2.981	0.3341	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-5	21.16	n/a	4/12/2022	7.35	No	16	10.05	4.656	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-6	4.019	n/a	4/12/2022	3.38	No	16	9.249	2.894	6.25	None	x^2	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-7	4.585	n/a	4/12/2022	3.29	No	16	3.546	0.4352	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-8	2.505	n/a	4/12/2022	1.54	No	16	1.679	0.3463	12.5	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-9	3.098	n/a	4/12/2022	1.91	No	16	5.326	1.791	6.25	None	x^2	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-1	6.359	n/a	4/13/2022	4.24	No	16	4.188	0.9103	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-10	2.255	n/a	4/13/2022	1.68J	No	16	4.979	2.722	12.5	None	x^3	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-11	14.58	n/a	4/13/2022	2.73	No	16	2.28	0.6446	0	None	sqrt(x)	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-12	16.13	n/a	4/13/2022	8.25	No	16	8.719	3.106	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-13	10.31	n/a	4/13/2022	7.27	No	16	8.234	0.871	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-14S	16.97	n/a	4/13/2022	2.44	No	16	7.728	3.872	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-15	5.392	n/a	4/12/2022	1.76J	No	16	2.705	1.126	6.25	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-2	11.38	n/a	4/12/2022	8.36	No	16	7.632	1.57	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-3	19.53	n/a	4/12/2022	7.36	No	11	11.88	2.842	0	None	No	0.0007523	Param Intra 1 of 2
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>37.06</b>	<b>n/a</b>	<b>4/12/2022</b>	<b>145</b>	<b>Yes</b>	<b>9</b>	<b>15.51</b>	<b>7.278</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Sulfate (mg/L)	GN-GSA-MW-6	1.89	n/a	4/12/2022	0.5ND	No	14	n/a	n/a	64.29	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	GN-GSA-MW-7	14.59	n/a	4/12/2022	5.75	No	16	9.522	2.123	0	None	No	0.0007523	Param Intra 1 of 2
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>2.935</b>	<b>n/a</b>	<b>4/12/2022</b>	<b>3.13</b>	<b>Yes</b>	<b>9</b>	<b>1.843</b>	<b>0.3686</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Sulfate (mg/L)	GN-GSA-MW-9	6.776	n/a	4/12/2022	4.09	No	16	5.406	0.5742	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-1	259.7	n/a	4/13/2022	217	No	16	207.7	21.8	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-10	274	n/a	4/13/2022	273	No	9	251.8	7.496	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-11	105.2	n/a	4/13/2022	84	No	16	70.39	14.61	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-12	281.5	n/a	4/13/2022	250	No	16	226.9	22.87	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-13	317.1	n/a	4/13/2022	266	No	16	1.9e7	5203459	0	None	x^3	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-14S	224.5	n/a	4/13/2022	187	No	16	200.8	9.97	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-15	60.07	n/a	4/12/2022	27.3	No	16	39.45	8.643	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-2	309	n/a	4/12/2022	271	No	16	285.3	9.95	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-3	388.2	n/a	4/12/2022	156	No	16	268.7	50.11	0	None	No	0.0007523	Param Intra 1 of 2
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>295.1</b>	<b>n/a</b>	<b>4/12/2022</b>	<b>400</b>	<b>Yes</b>	<b>9</b>	<b>203.3</b>	<b>30.98</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
TDS (mg/L)	GN-GSA-MW-6	30	n/a	4/12/2022	12.5ND	No	16	n/a	n/a	68.75	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
TDS (mg/L)	GN-GSA-MW-7	256.7	n/a	4/12/2022	214	No	16	220.7	15.11	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-8	202.5	n/a	4/12/2022	176	No	16	188.9	5.691	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-9	212	n/a	4/12/2022	155	No	16	170.2	17.53	0	None	No	0.0007523	Param Intra 1 of 2

# Interwell Prediction Limits - Significant Results

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 5/31/2022, 10:06 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GN-GSA-MW-1	0.125	n/a	4/13/2022	0.307	Yes	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-6	7.53	5.25	4/12/2022	4.38	Yes	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2

# Interwell Prediction Limits - All Results

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 5/31/2022, 10:06 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GN-GSA-MW-1	0.1015	n/a	4/13/2022	0.0353J	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-10	0.1015	n/a	4/13/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-11	0.1015	n/a	4/13/2022	0.0565J	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-12	0.1015	n/a	4/13/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-13	0.1015	n/a	4/13/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-5	0.1015	n/a	4/12/2022	0.0481J	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-6	0.1015	n/a	4/12/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-7	0.1015	n/a	4/12/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-8	0.1015	n/a	4/12/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-9	0.1015	n/a	4/12/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>0.125</b>	<b>n/a</b>	<b>4/13/2022</b>	<b>0.307</b>	<b>Yes</b>	<b>76</b>	<b>n/a</b>	<b>n/a</b>	<b>40.79</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0003321</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	GN-GSA-MW-10	0.125	n/a	4/13/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-11	0.125	n/a	4/13/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-12	0.125	n/a	4/13/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-13	0.125	n/a	4/13/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-5	0.125	n/a	4/12/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-6	0.125	n/a	4/12/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-7	0.125	n/a	4/12/2022	0.0724J	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-8	0.125	n/a	4/12/2022	0.0621J	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-9	0.125	n/a	4/12/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-1	7.53	5.25	4/13/2022	7.5	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-10	7.53	5.25	4/13/2022	6.85	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-11	7.53	5.25	4/13/2022	5.29	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-12	7.53	5.25	4/13/2022	6.74	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-13	7.53	5.25	4/13/2022	6.84	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-5	7.53	5.25	4/12/2022	6.32	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
<b>pH (pH)</b>	<b>GN-GSA-MW-6</b>	<b>7.53</b>	<b>5.25</b>	<b>4/12/2022</b>	<b>4.38</b>	<b>Yes</b>	<b>76</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0006643</b>	<b>NP Inter (normality) 1 of 2</b>
pH (pH)	GN-GSA-MW-7	7.53	5.25	4/12/2022	6.73	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-8	7.53	5.25	4/12/2022	7.22	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-9	7.53	5.25	4/12/2022	6.22	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2

# Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:10 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-12	3.901	102	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-15 (bg)	-0.8106	-117	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-3 (bg)	-9.601	-119	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-5	6.556	115	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-11	1.703	117	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-14S (bg)	-0.4589	-110	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-15 (bg)	-0.3293	-87	-68	Yes	18	5.556	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-3 (bg)	-0.09949	-77	-68	Yes	18	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-15 (bg)	-0.05887	-104	-74	Yes	19	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-3 (bg)	-0.07961	-75	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-14S (bg)	-1.698	-97	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-0.3716	-87	-68	Yes	18	5.556	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-3 (bg)	-3.054	-137	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-5	20.37	115	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-8	0.5214	93	68	Yes	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-15 (bg)	-4.203	-92	-68	Yes	18	5.556	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-3 (bg)	-28.38	-131	-68	Yes	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-5	39.13	116	68	Yes	18	0	n/a	n/a	0.01	NP

# Trend Tests - Prediction Limit Exceedances - All Results

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 5/31/2022, 10:10 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>3.901</b>	<b>102</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-14S (bg)	-0.2897	-13	-68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.8106</b>	<b>-117</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-2 (bg)	1.479	52	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-9.601</b>	<b>-119</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>6.556</b>	<b>115</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>1.703</b>	<b>117</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-0.4589</b>	<b>-110</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.3293</b>	<b>-87</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>5.556</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	GN-GSA-MW-2 (bg)	-0.001806	-3	-68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-0.09949</b>	<b>-77</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride (mg/L)	GN-GSA-MW-1	-0.0004986	-5	-74	No	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-14S (bg)	0.003036	30	74	No	19	26.32	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-15 (bg)	0	65	74	No	19	73.68	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-2 (bg)	0.004864	55	74	No	19	52.63	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-3 (bg)	0	-4	-74	No	19	10.53	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-14S (bg)	-0.01357	-39	-74	No	19	0	n/a	n/a	0.01	NP
<b>pH (pH)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.05887</b>	<b>-104</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (pH)	GN-GSA-MW-2 (bg)	-0.01583	-55	-74	No	19	0	n/a	n/a	0.01	NP
<b>pH (pH)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-0.07961</b>	<b>-75</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (pH)	GN-GSA-MW-6	-0.02307	-38	-74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-1.698</b>	<b>-97</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.3716</b>	<b>-87</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>5.556</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GN-GSA-MW-2 (bg)	0.2537	41	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-3.054</b>	<b>-137</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>20.37</b>	<b>115</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>0.5214</b>	<b>93</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GN-GSA-MW-14S (bg)	-3.067	-61	-68	No	18	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-4.203</b>	<b>-92</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>5.556</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GN-GSA-MW-2 (bg)	-1.64	-33	-68	No	18	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-28.38</b>	<b>-131</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>39.13</b>	<b>116</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Upper Tolerance Limits - Summary Table

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 1/11/2022, 10:38 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq 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)	n/a	0.00117	n/a	n/a	n/a	68	n/a	n/a	95.59	n/a	n/a	0.03056	NP Inter
Arsenic (mg/L)	n/a	0.00032	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Barium (mg/L)	n/a	0.0622	n/a	n/a	n/a	68	n/a	n/a	0	n/a	n/a	0.03056	NP Inter
Beryllium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Cadmium (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Chromium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Cobalt (mg/L)	n/a	0.00313	n/a	n/a	n/a	68	n/a	n/a	94.12	n/a	n/a	0.03056	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	2.36	n/a	n/a	n/a	68	n/a	n/a	2.941	n/a	n/a	0.03056	NP Inter
Fluoride (mg/L)	n/a	0.111	n/a	n/a	n/a	72	n/a	n/a	37.5	n/a	n/a	0.02489	NP Inter
Lead (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Lithium (mg/L)	n/a	0.02	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Molybdenum (mg/L)	n/a	0.00046	n/a	n/a	n/a	68	n/a	n/a	92.65	n/a	n/a	0.03056	NP Inter
Selenium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter
Thallium (mg/L)	n/a	0.000228	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter



<b>GASTON GYPSUM POND GWPS</b>			
<b>Analyte</b>	<b>Units</b>	<b>Background</b>	<b>GWPS</b>
Antimony	mg/L	0.00117	0.006
Arsenic	mg/L	0.00032	0.01
Barium	mg/L	0.0622	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.00102	0.1
Cobalt	mg/L	0.00313	0.006
Combined Radium-226/228	pCi/L	2.36	5
Fluoride	mg/L	0.111	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00046	0.1
Selenium	mg/L	0.00102	0.05
Thallium	mg/L	0.000228	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2021.

# Confidence Intervals - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:18 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>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	GN-GSA-MW-1	2.585	2.002	2	Yes	8	2.294	0.275	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 5/31/2022, 10:18 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.00102	0.000909	0.006	No	8	0.001006	0.00003924	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.00102	0.000916	0.006	No	8	0.001007	0.00003677	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.00102	0.000813	0.006	No	8	0.0009941	0.00007319	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.00127	0.00102	0.006	No	8	0.001051	0.00008839	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-5	0.00241	0.00102	0.006	No	8	0.001194	0.0004914	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.00171	0.00102	0.006	No	8	0.001106	0.000244	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.00123	0.00102	0.006	No	8	0.001046	0.00007425	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.00106	0.00102	0.006	No	8	0.001025	0.00001414	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.00112	0.00102	0.006	No	8	0.001032	0.00003536	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.007288	0.003149	0.01	No	8	0.005219	0.001953	0	None	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-10	0.0002	0.00007	0.01	No	8	0.0001696	0.00005641	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.0002	0.00009	0.01	No	8	0.0001617	0.00005318	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-12	0.00033	0.0002	0.01	No	8	0.0002212	0.00004518	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-13	0.00348	0.00012	0.01	No	8	0.0005911	0.001168	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-5	0.00235	0.0001442	0.01	No	8	0.001247	0.001112	25	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-6	0.0002	0.00008	0.01	No	8	0.0001611	0.0000543	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.001	0.0002	0.01	No	8	0.0003736	0.0002757	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-8	0.001412	0.001208	0.01	No	8	0.00131	0.00009577	0	None	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-9	0.000237	0.00014	0.01	No	8	0.0001946	0.00002709	62.5	None	No	0.004	NP (NDs)
<b>Barium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>2.585</b>	<b>2.002</b>	<b>2</b>	<b>Yes</b>	<b>8</b>	<b>2.294</b>	<b>0.275</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Barium (mg/L)	GN-GSA-MW-10	0.03934	0.03324	2	No	8	0.03629	0.002878	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.0162	0.00444	2	No	8	0.007318	0.003807	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-12	0.02502	0.01835	2	No	8	0.02169	0.003146	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.0697	0.0369	2	No	8	0.04506	0.01039	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-5	0.07437	0.04615	2	No	8	0.06026	0.01331	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-6	0.01949	0.01554	2	No	8	0.01751	0.001865	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-7	0.02285	0.01553	2	No	8	0.01919	0.003452	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-8	0.0314	0.0257	2	No	8	0.02788	0.002458	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-9	0.02639	0.02224	2	No	8	0.02431	0.001956	0	None	No	0.01	Param.
Cadmium (mg/L)	GN-GSA-MW-10	0.0002	0.00008	0.005	No	8	0.000185	0.00004243	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.00102	0.00021	0.1	No	8	0.0009187	0.0002864	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.00102	0.00023	0.1	No	8	0.0009212	0.0002793	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.00102	0.0003	0.1	No	8	0.00093	0.0002546	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-12	0.00102	0.00021	0.1	No	8	0.0008275	0.0003571	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.002	0.000518	0.1	No	8	0.0009585	0.000486	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GN-GSA-MW-5	0.00102	0.00028	0.1	No	8	0.0008362	0.0003402	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.00102	0.00022	0.1	No	8	0.0007284	0.0004026	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.00102	0.000361	0.1	No	8	0.0008801	0.0002644	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.00102	0.000291	0.1	No	8	0.0007639	0.0003542	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-9	0.00102	0.00021	0.1	No	8	0.0008257	0.0003601	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.003096	0.001659	0.006	No	8	0.002322	0.0009415	12.5	None	x^2	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-12	0.00042	0.00016	0.006	No	8	0.0002247	0.00008055	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-13	0.0002	0.0001	0.006	No	8	0.0001822	0.00003634	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.004722	0.0004226	0.006	No	8	0.002509	0.002176	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-6	0.000682	0.0002	0.006	No	8	0.000374	0.0002403	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-7	0.00217	0.0002	0.006	No	8	0.0005837	0.0006766	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-8	0.0002	0.00007	0.006	No	8	0.0001666	0.00005003	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-9	0.00041	0.0000816	0.006	No	8	0.0002114	0.00009029	75	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.78	0.925	5	No	8	1.344	0.4583	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	2.293	0.1533	5	No	8	1.181	1.637	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.773	0.07089	5	No	8	0.8594	1.096	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	1.413	0.2411	5	No	8	0.8273	0.553	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	1.643	0.2405	5	No	8	0.9734	1.222	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	1.105	0.08199	5	No	8	0.5935	0.4826	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	1.245	0.07475	5	No	8	0.6598	0.5519	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.9881	0.0946	5	No	8	0.5414	0.4215	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.8329	0.0974	5	No	8	0.4652	0.347	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	0.8409	0.1718	5	No	8	0.4904	0.3597	0	None	x^(1/3)	0.01	Param.

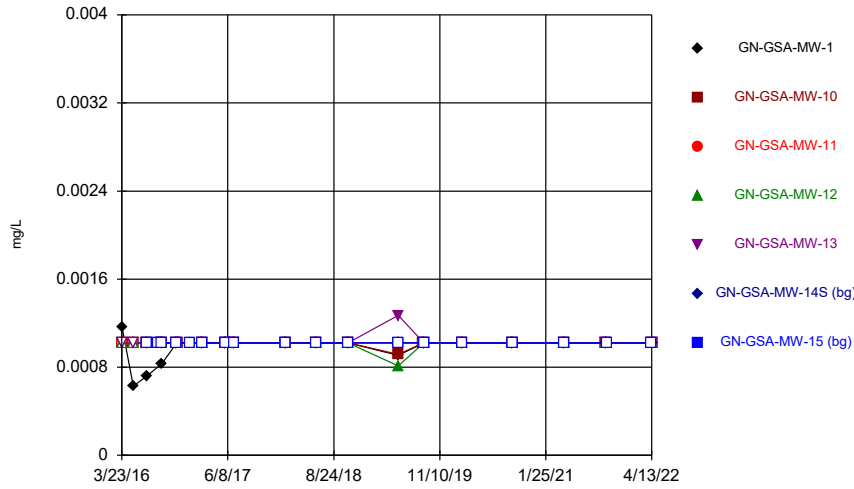
# Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:18 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>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	GN-GSA-MW-1	0.3666	0.2762	4	No	8	0.3214	0.04265	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-10	0.125	0.0617	4	No	8	0.1171	0.02238	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GN-GSA-MW-12	0.125	0.0547	4	No	8	0.08515	0.03324	37.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.125	0.05	4	No	8	0.07733	0.03031	25	None	No	0.004	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-5	0.125	0.06	4	No	8	0.1082	0.02523	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GN-GSA-MW-7	0.1223	0.07583	4	No	8	0.09906	0.02192	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1467	0.08954	4	No	8	0.1181	0.02698	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.125	0.05	4	No	8	0.08628	0.03525	37.5	None	No	0.004	NP (normality)
Lead (mg/L)	GN-GSA-MW-11	0.0002	0.00011	0.015	No	8	0.0001887	0.00003182	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.00228	0.0002	0.015	No	8	0.00046	0.0007354	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.0004	0.0002	0.015	No	8	0.0002519	0.00007709	62.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-9	0.0002	0.00011	0.015	No	8	0.0001887	0.00003182	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.02	0.00953	0.04	No	8	0.01486	0.005492	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-1	0.005371	0.003419	0.1	No	8	0.004395	0.000921	0	None	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-12	0.01	0.000298	0.1	No	8	0.006367	0.005014	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-13	0.01	0.00016	0.1	No	8	0.006318	0.005081	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-5	0.01	0.00009	0.1	No	8	0.006288	0.005123	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-7	0.01	0.00025	0.1	No	8	0.006349	0.005038	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-8	0.004113	0.003199	0.1	No	8	0.003656	0.000431	0	None	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.01	0.000207	0.1	No	8	0.006342	0.005048	62.5	None	No	0.004	NP (NDs)

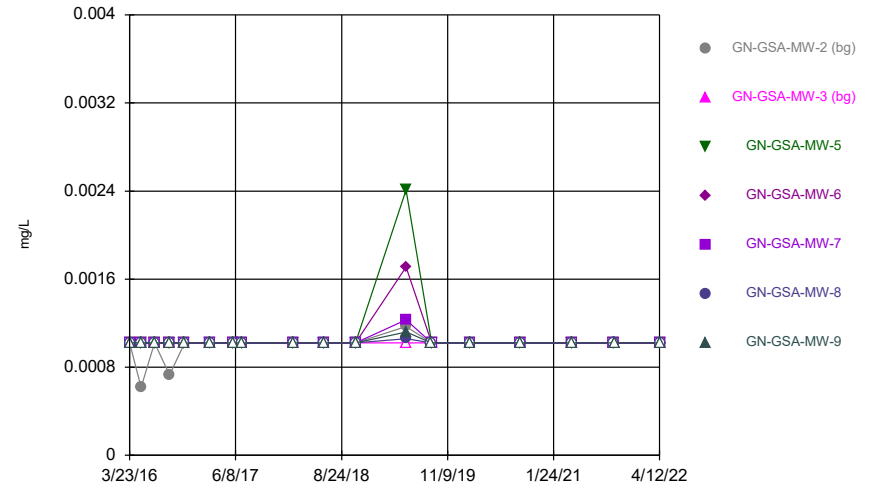
FIGURE A.

Time Series



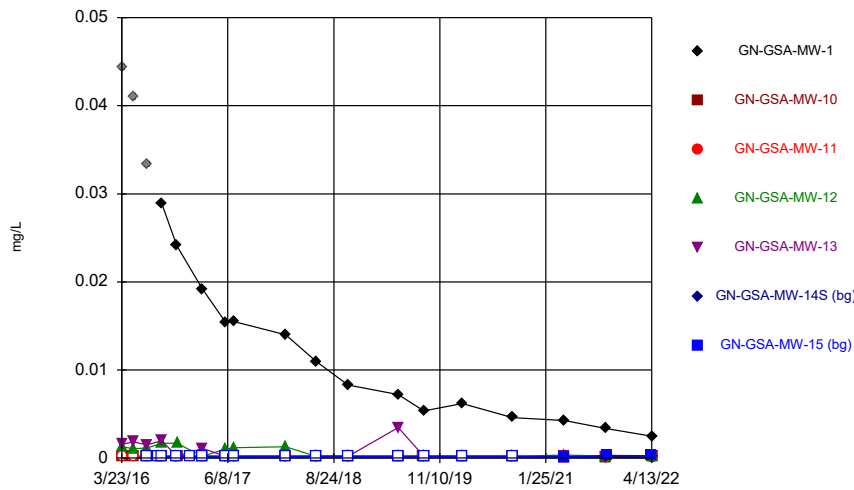
Constituent: Antimony Analysis Run 5/31/2022 10:23 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



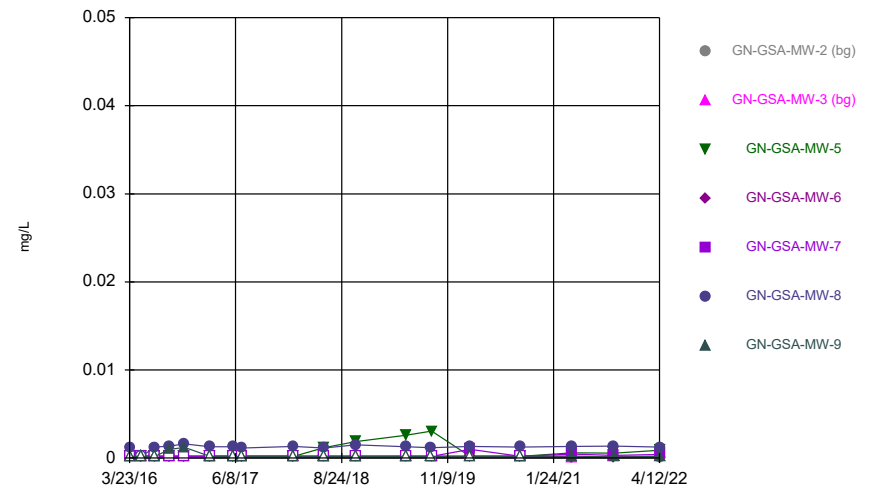
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Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



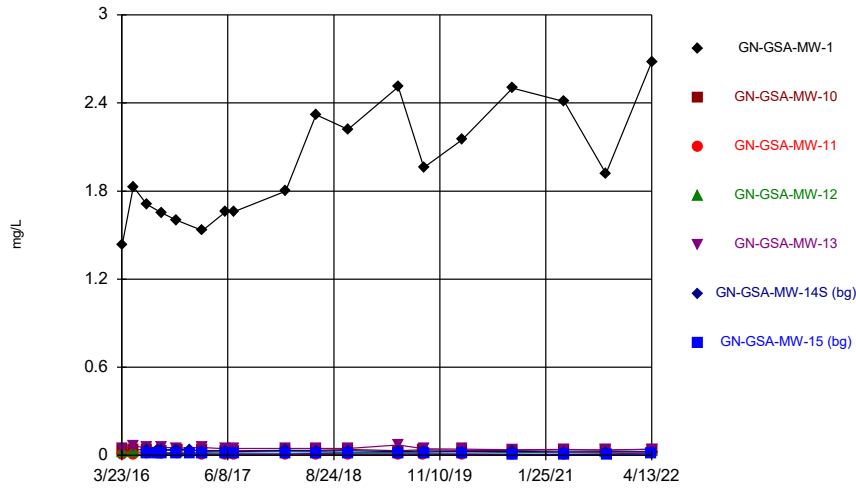
Constituent: Arsenic Analysis Run 5/31/2022 10:23 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



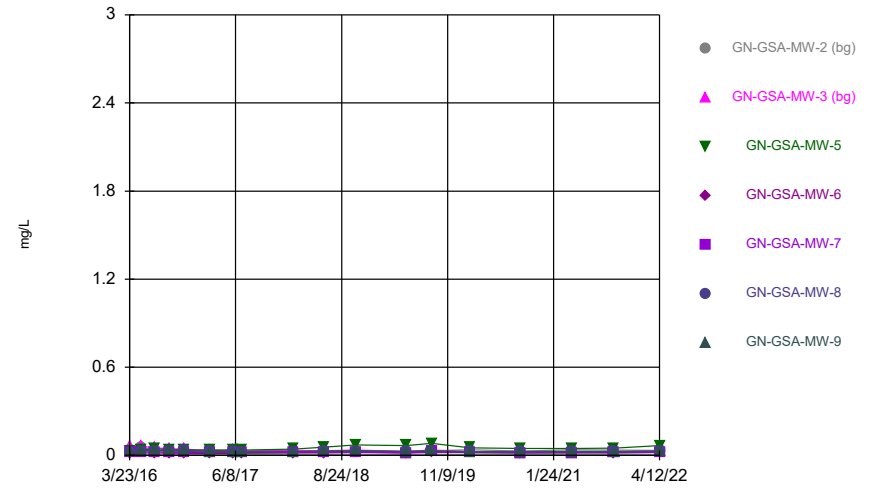
Constituent: Arsenic Analysis Run 5/31/2022 10:23 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



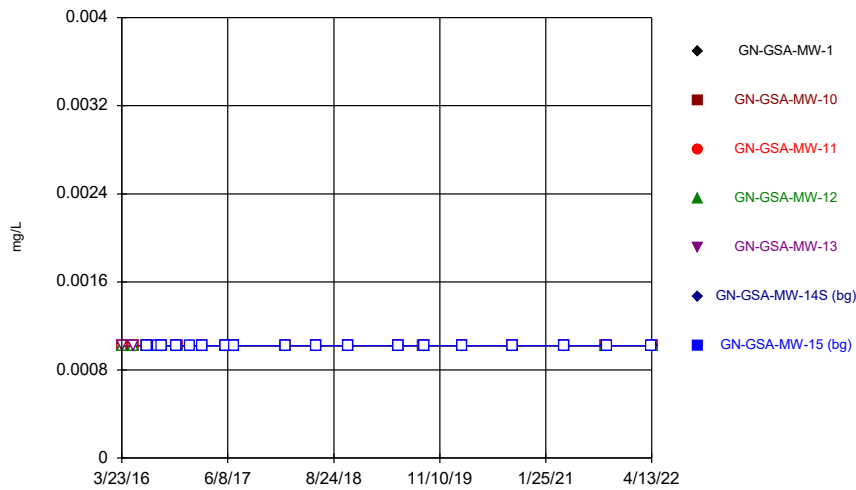
Constituent: Barium Analysis Run 5/31/2022 10:23 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



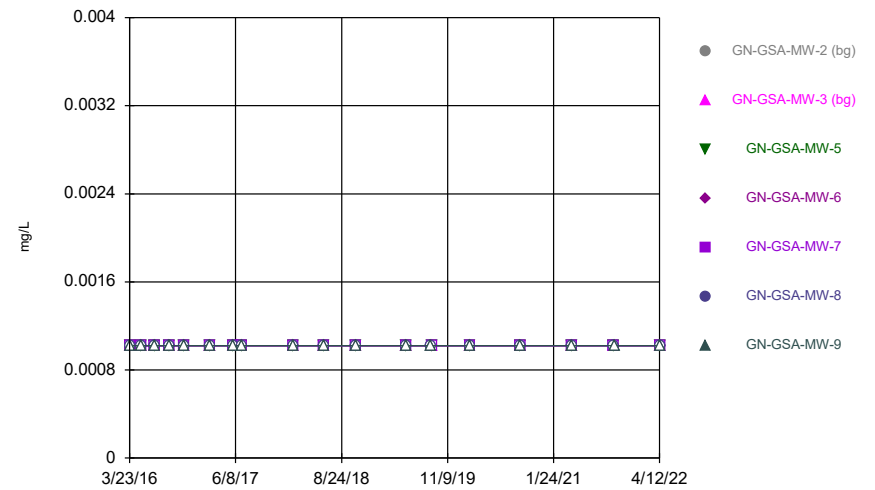
Constituent: Barium Analysis Run 5/31/2022 10:23 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



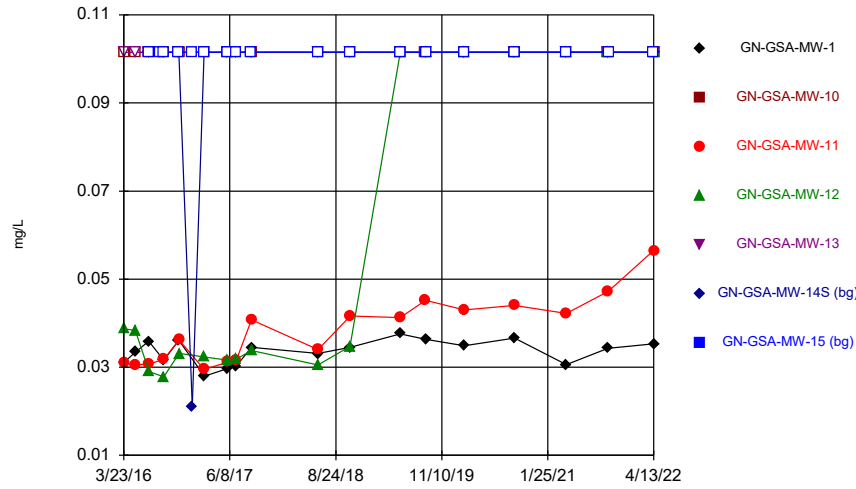
Constituent: Beryllium Analysis Run 5/31/2022 10:23 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



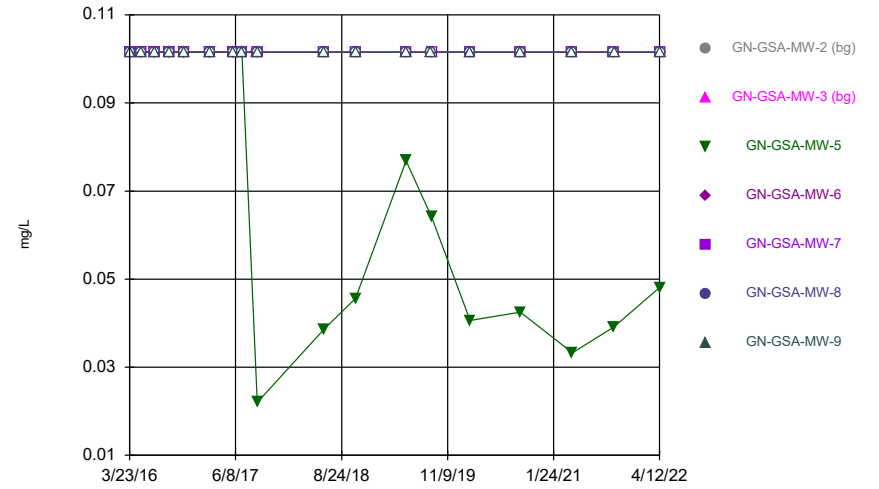
Constituent: Beryllium Analysis Run 5/31/2022 10:23 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



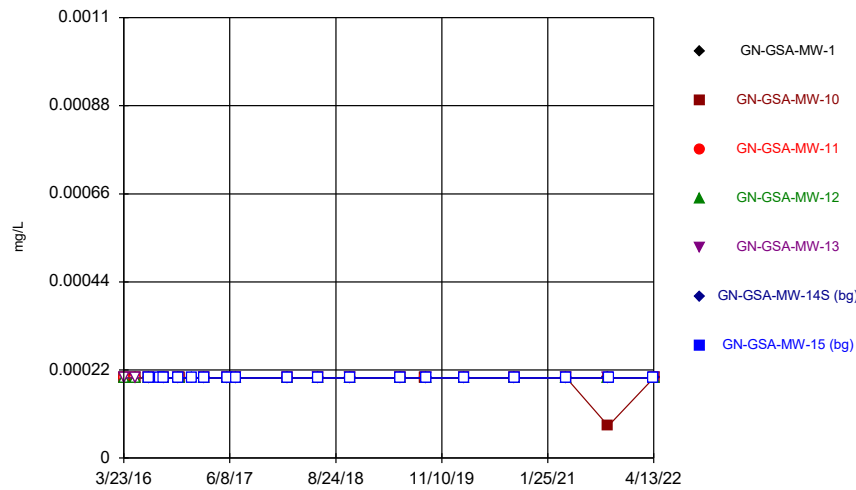
Constituent: Boron Analysis Run 5/31/2022 10:23 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



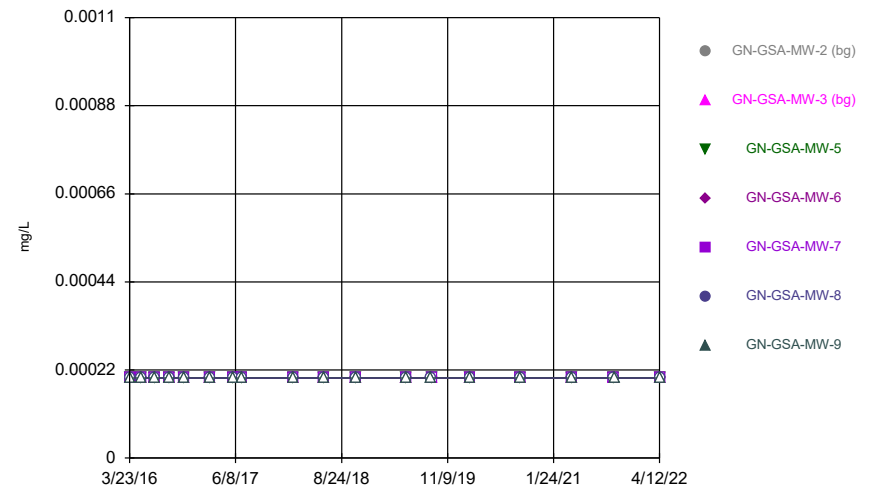
Constituent: Boron Analysis Run 5/31/2022 10:23 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



Constituent: Cadmium Analysis Run 5/31/2022 10:23 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

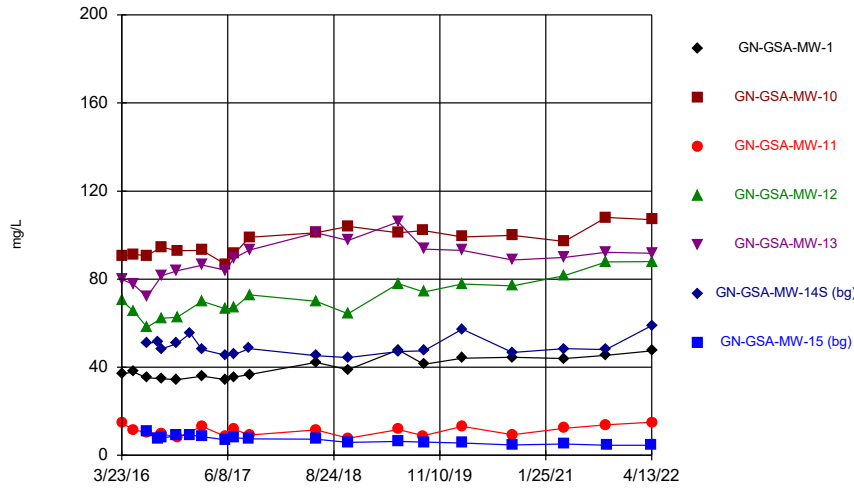
Time Series



Constituent: Cadmium Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

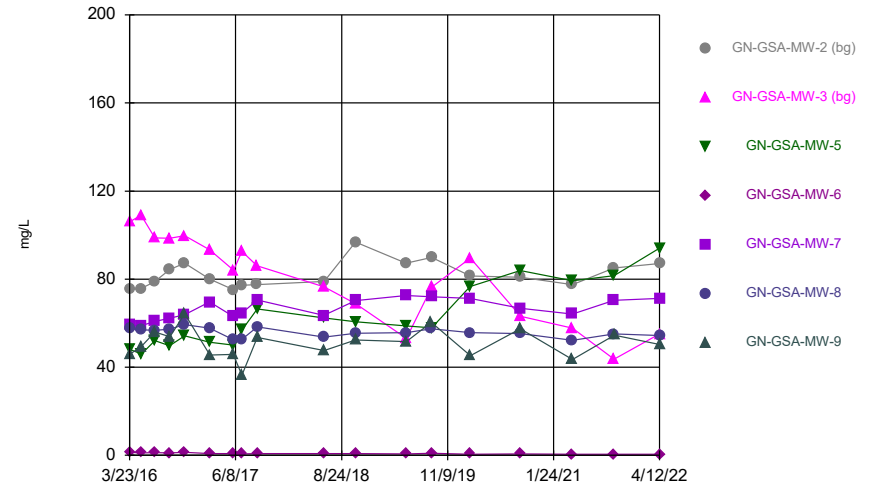


Time Series



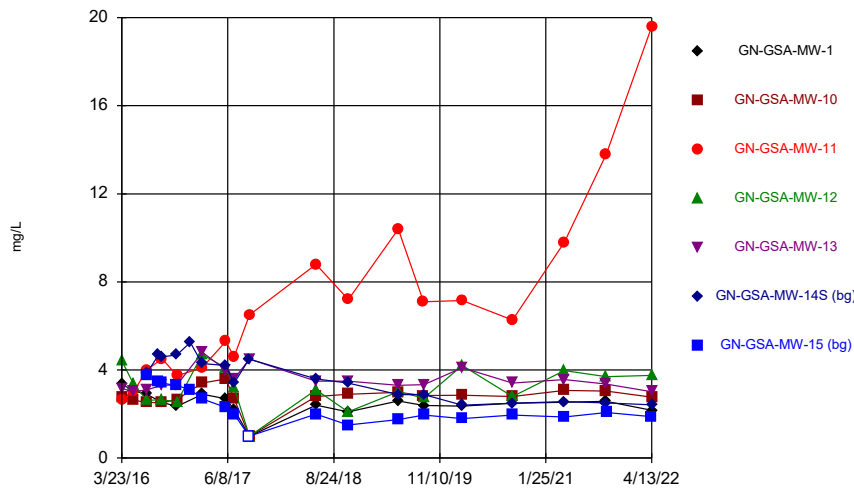
Constituent: Calcium Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



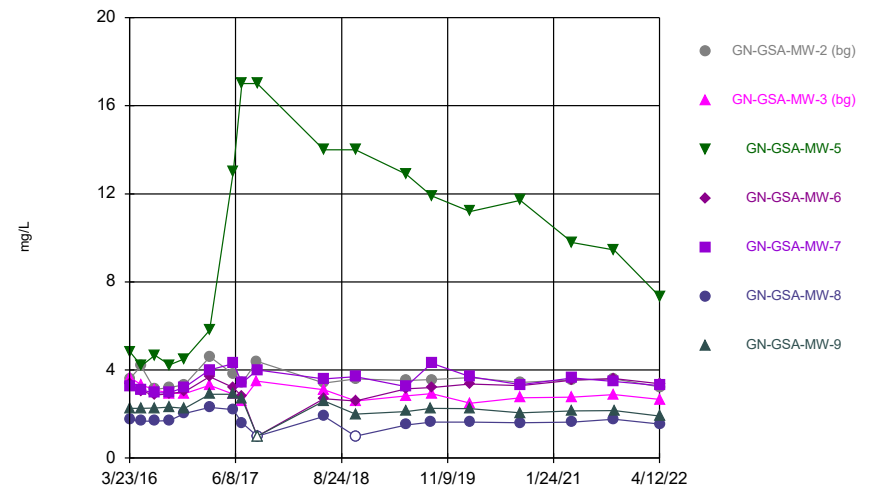
Constituent: Calcium Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



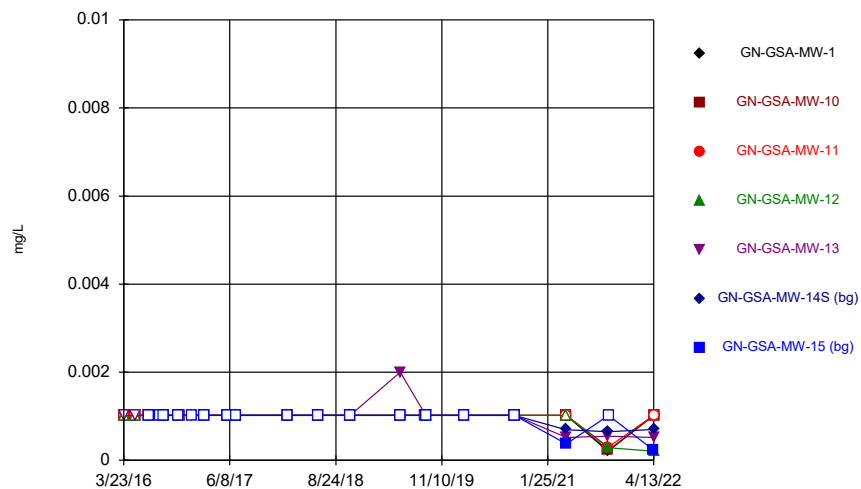
Constituent: Chloride Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



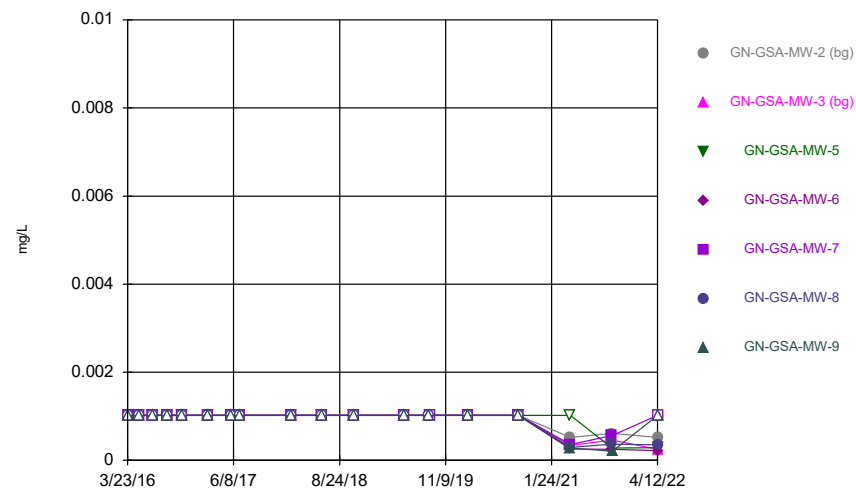
Constituent: Chloride Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



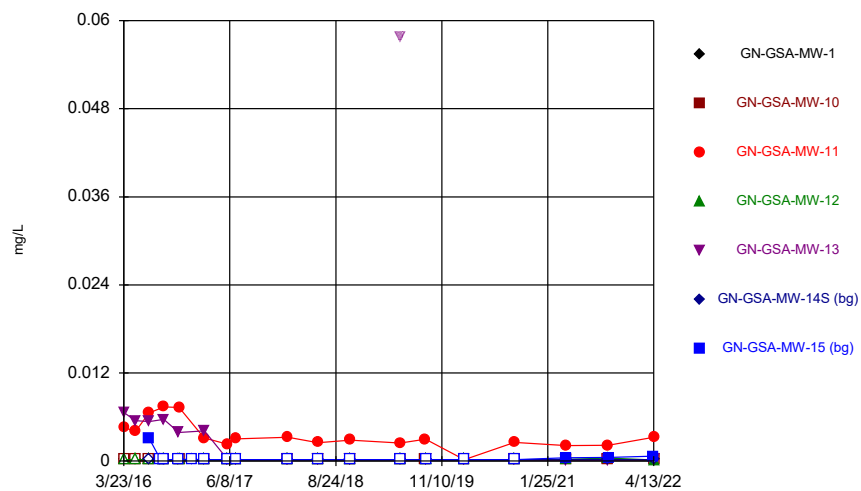
Constituent: Chromium Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



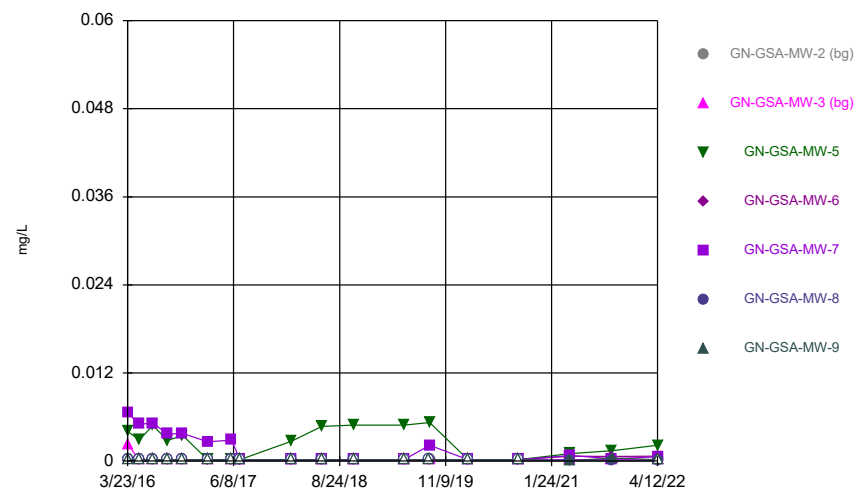
Constituent: Chromium Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



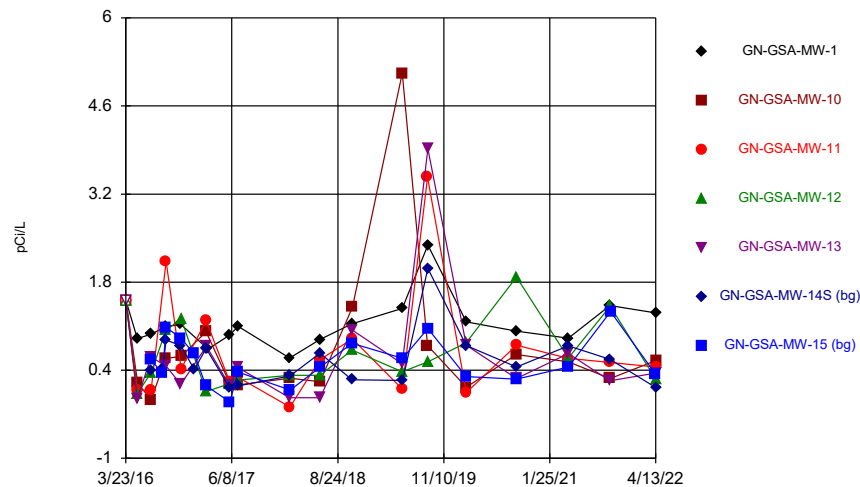
Constituent: Cobalt Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



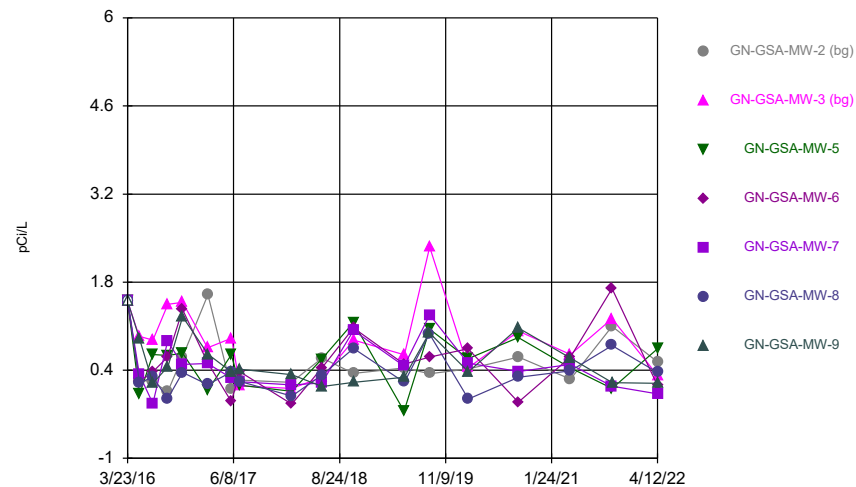
Constituent: Cobalt Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



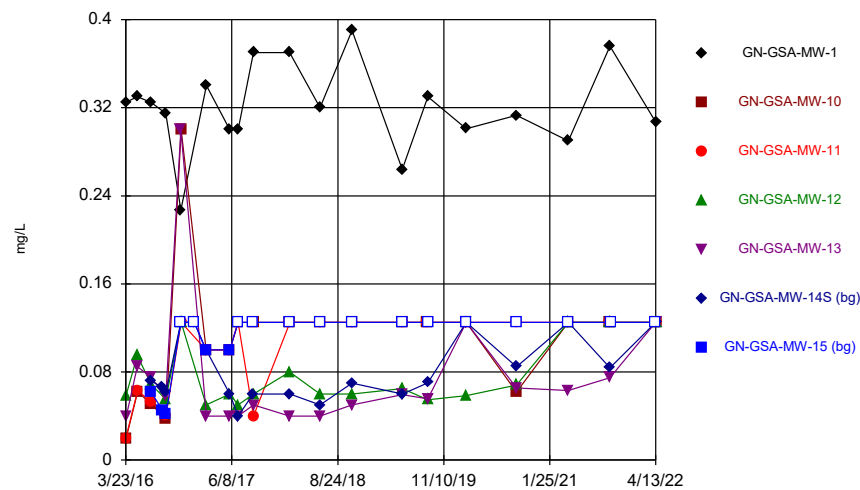
Constituent: Combined Radium 226 + 228 Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



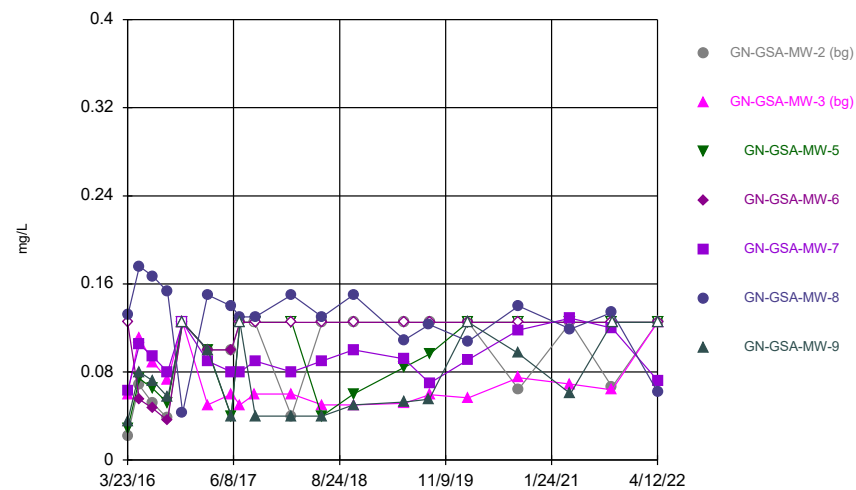
Constituent: Combined Radium 226 + 228 Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



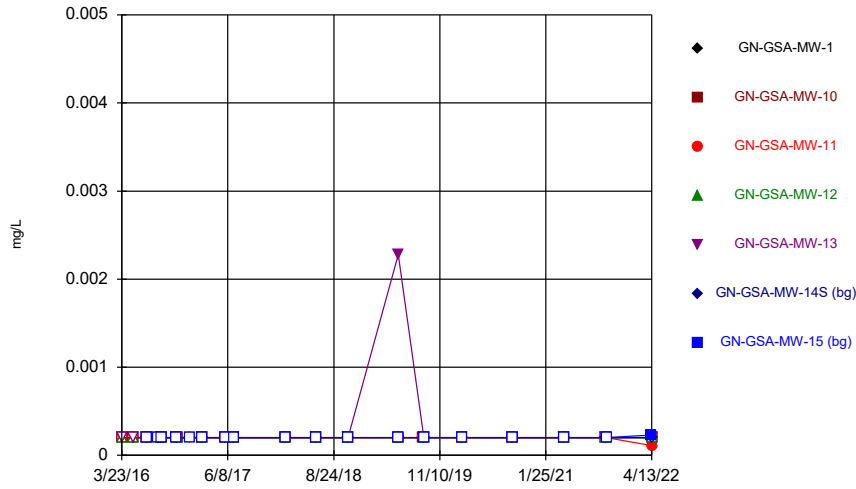
Constituent: Fluoride Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



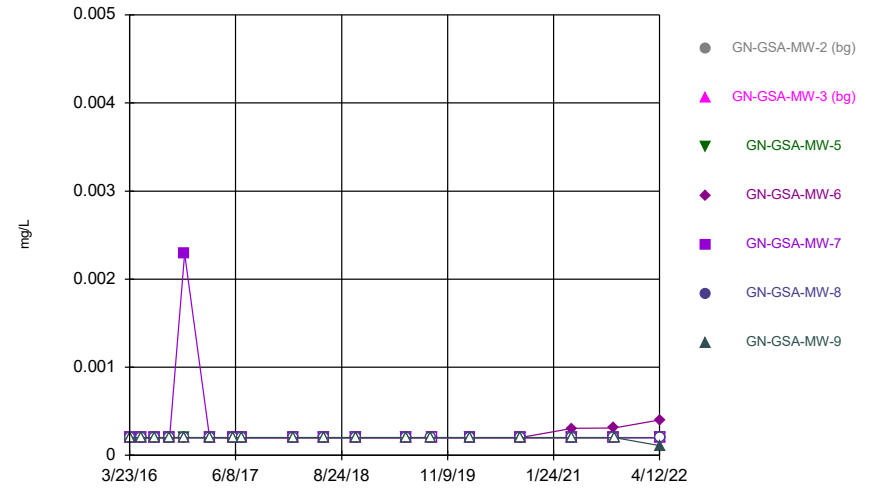
Constituent: Fluoride Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



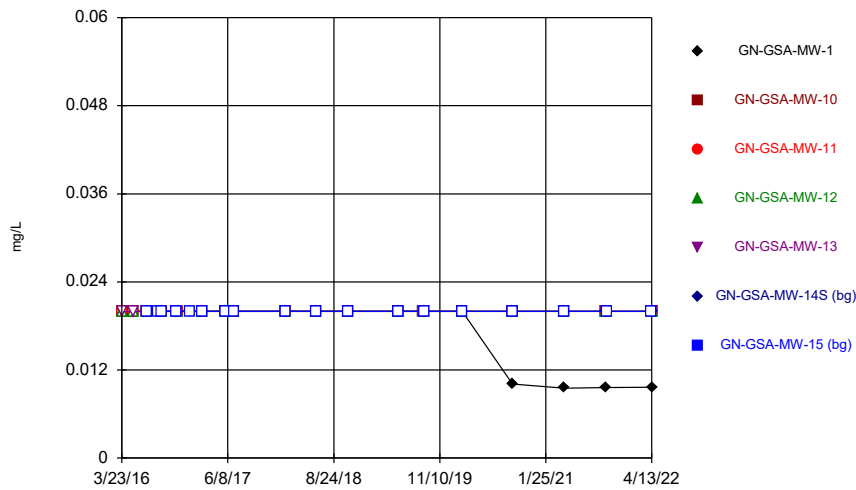
Constituent: Lead Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



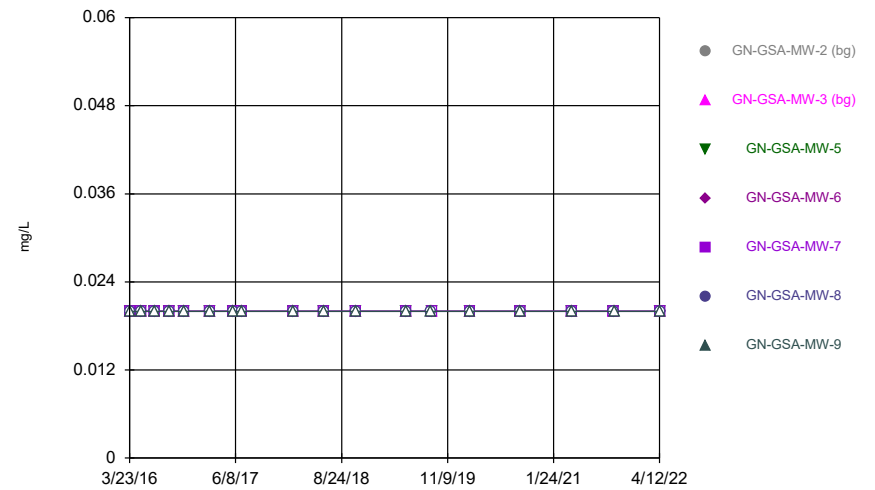
Constituent: Lead Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



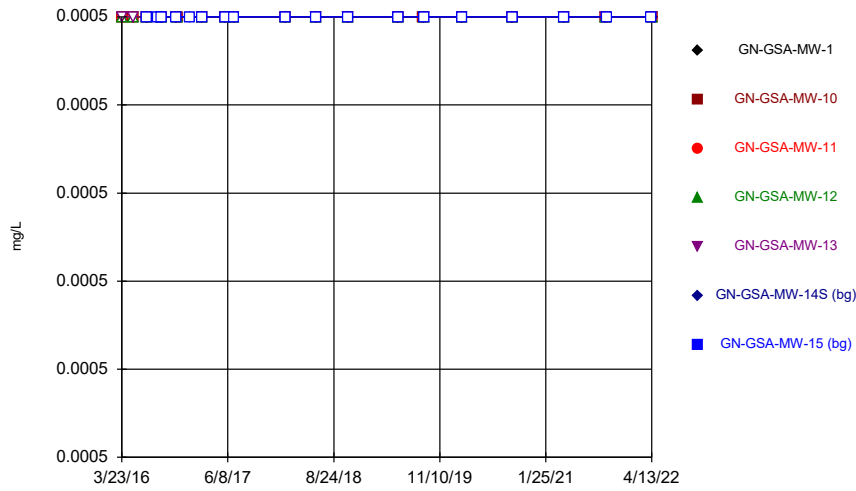
Constituent: Lithium Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



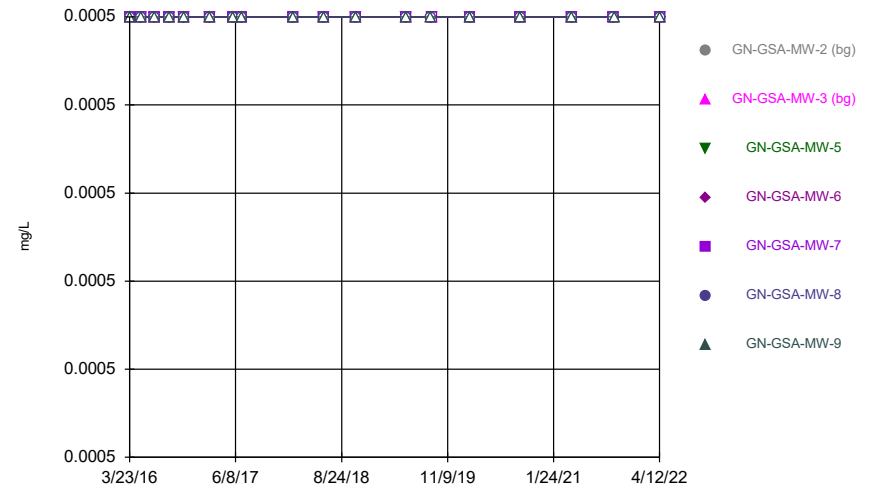
Constituent: Lithium Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



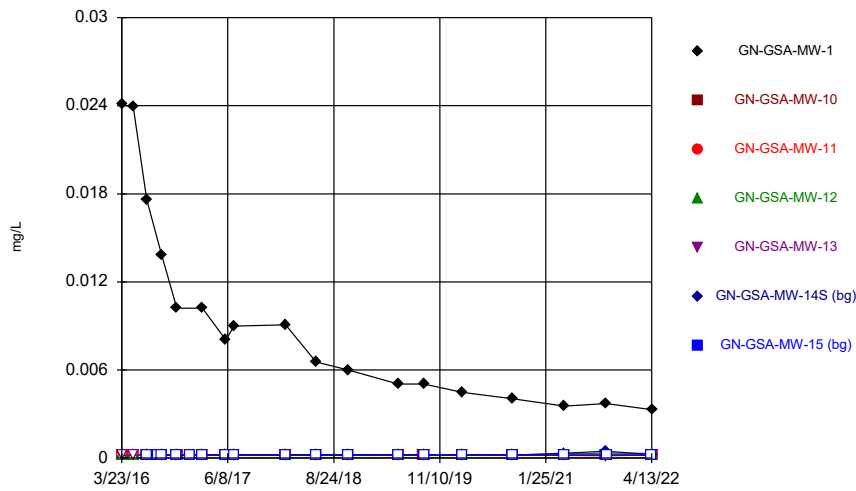
Constituent: Mercury Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



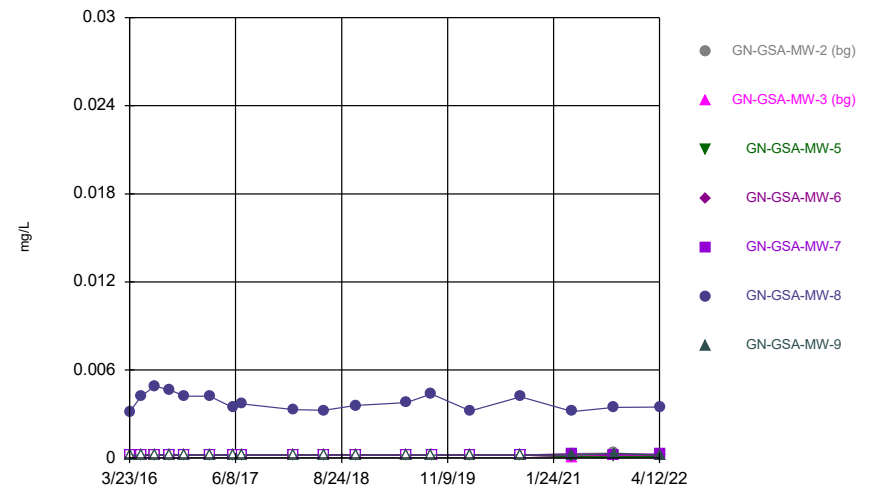
Constituent: Mercury Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



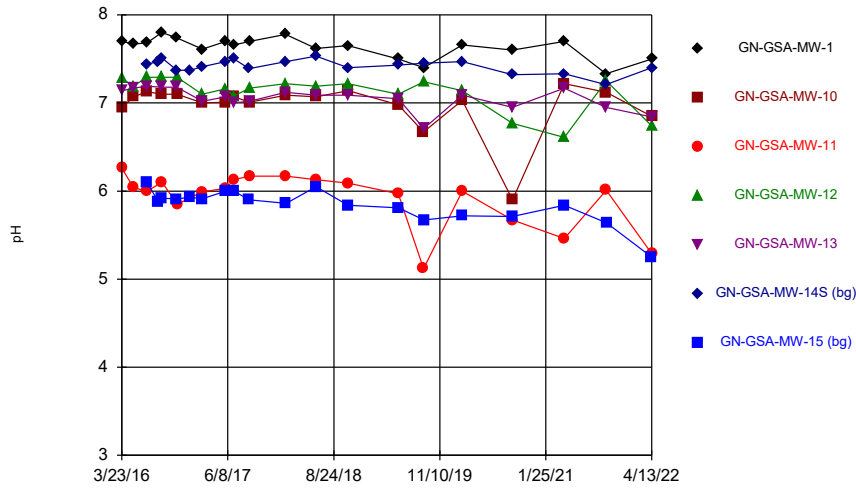
Constituent: Molybdenum Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



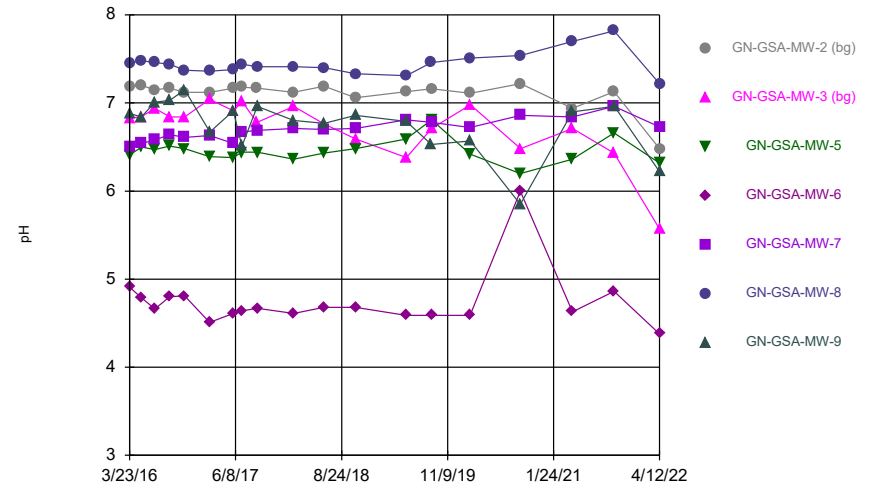
Constituent: Molybdenum Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



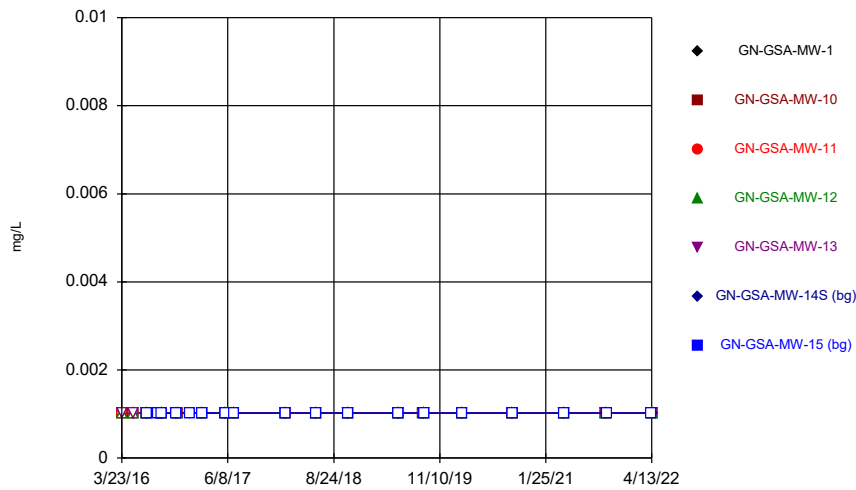
Constituent: pH Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



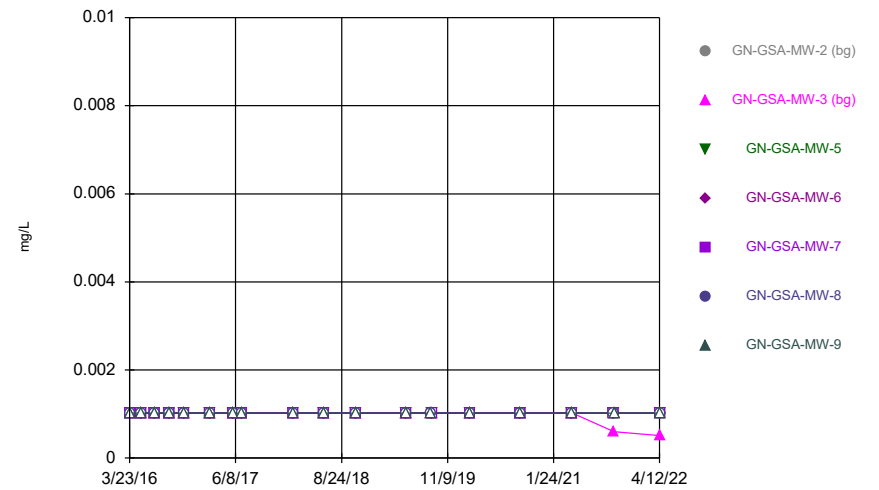
Constituent: pH Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



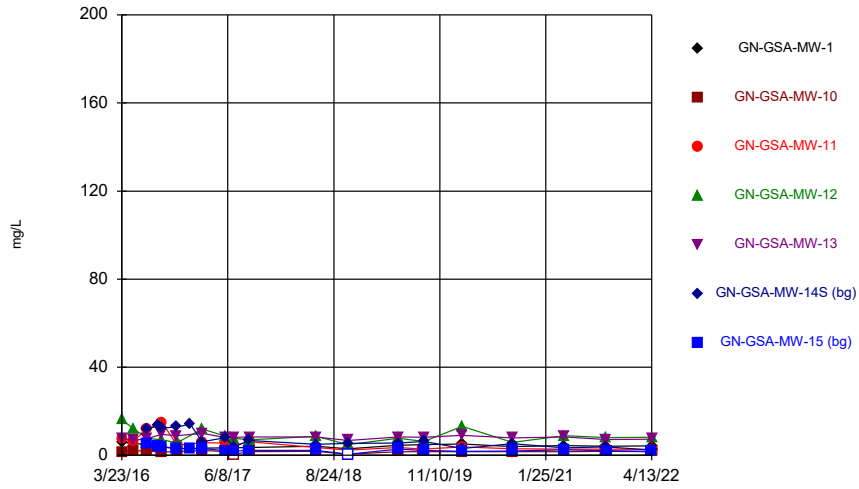
Constituent: Selenium Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



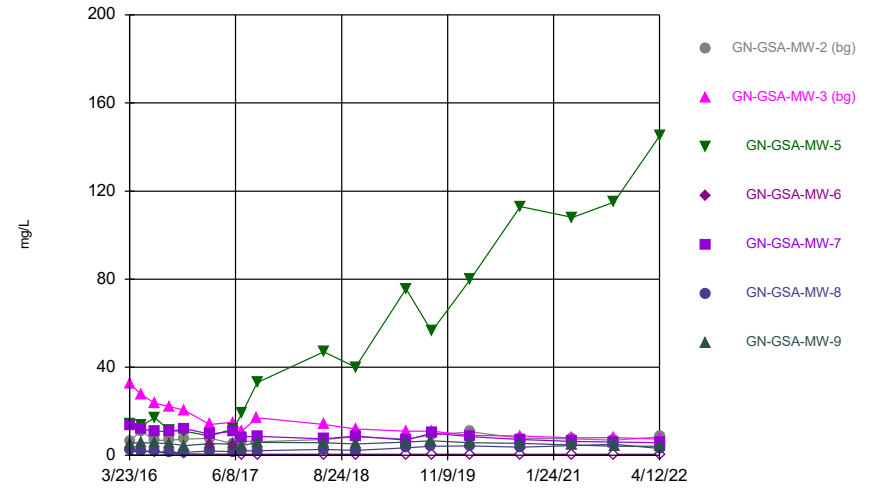
Constituent: Selenium Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



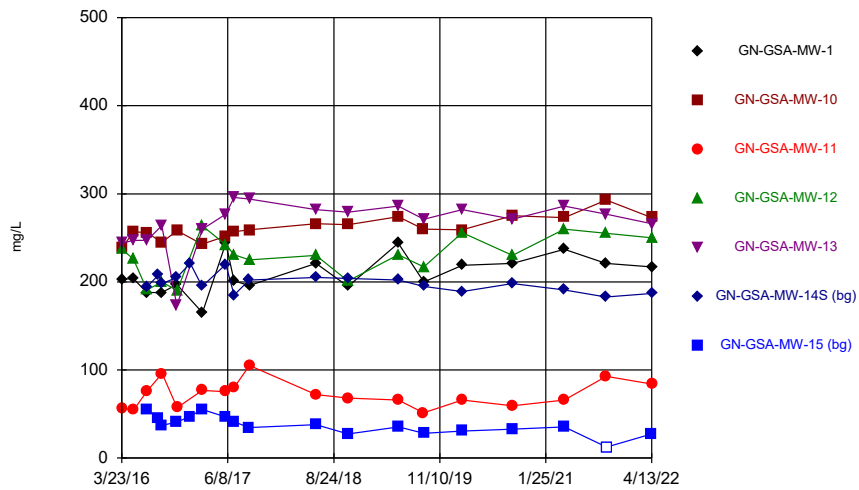
Constituent: Sulfate Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



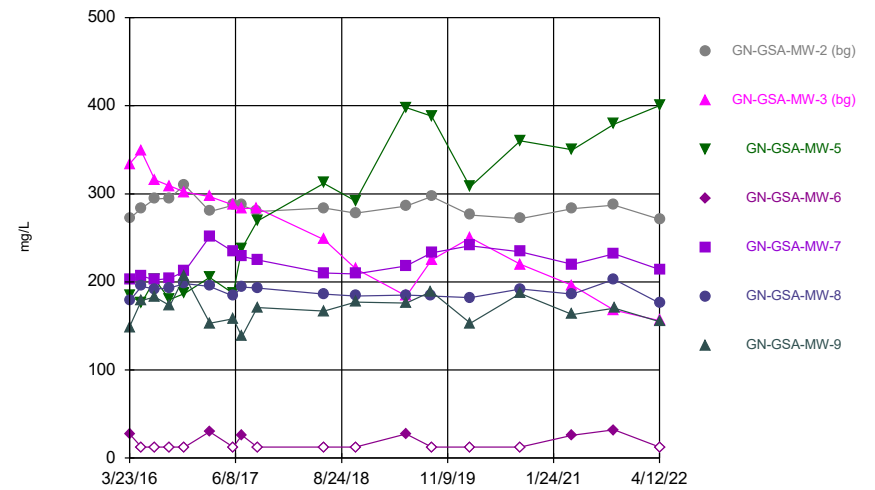
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



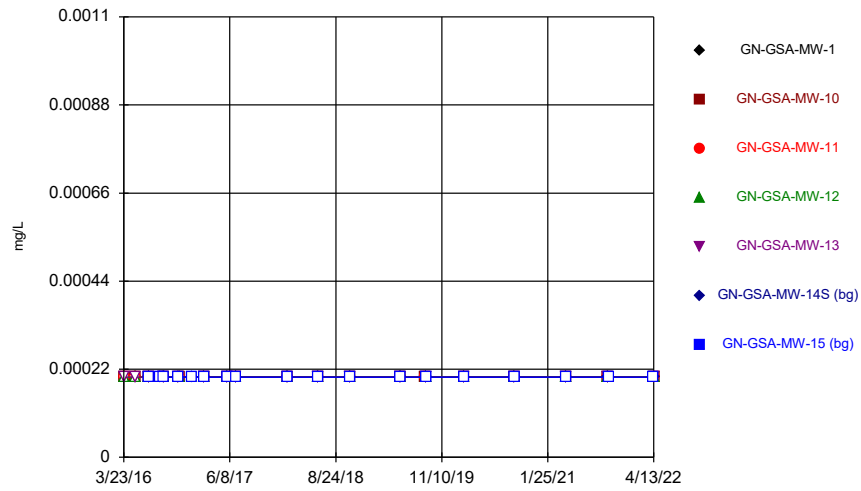
Constituent: TDS Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



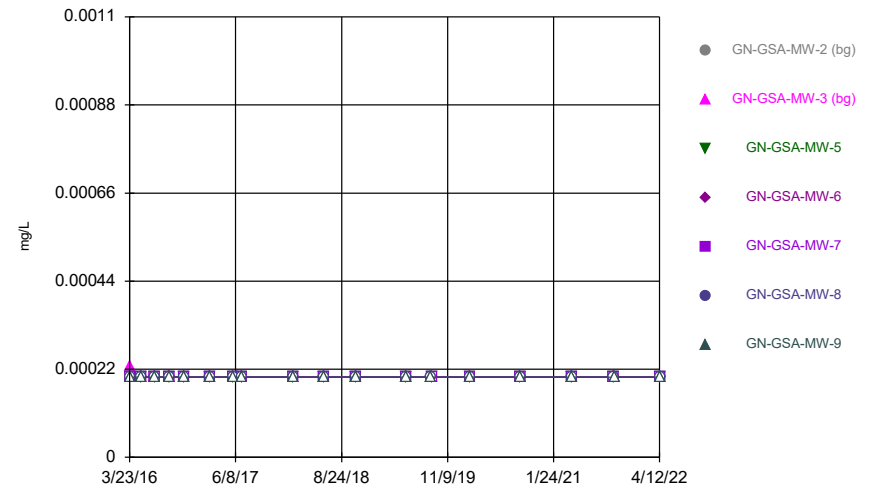
Constituent: TDS Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



Constituent: Thallium Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



Constituent: Thallium Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA







# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.0002	0.0013 (J)			
3/24/2016	0.0444 (o)	<0.0002			0.00157 (J)		
5/10/2016	0.041 (o)			0.00107 (J)	0.00182 (J)		
5/11/2016		<0.0002	<0.0002				
7/5/2016	0.0333 (o)					<0.0002	
7/6/2016		<0.0002	<0.0002	0.00113 (J)	0.00152 (J)		<0.0002
8/23/2016						<0.0002	<0.0002
9/6/2016	0.0289	<0.0002		0.00169 (J)	0.00197 (J)		
9/7/2016			<0.0002			<0.0002	<0.0002
11/8/2016	0.0241				<0.0002	<0.0002	<0.0002
11/9/2016		<0.0002	<0.0002	0.00168 (J)			
1/3/2017						<0.0002	<0.0002
2/20/2017							<0.0002
2/21/2017		<0.0002	<0.0002	<0.0002		<0.0002	
2/22/2017	0.0192				0.0011 (J)		
5/31/2017	0.0154	<0.0002	<0.0002	0.00102 (J)	<0.0002	<0.0002	<0.0002
7/5/2017	0.0155	<0.0002	<0.0002	0.00117 (J)	<0.0002	<0.0002	<0.0002
2/5/2018	0.014			0.00127 (J)	<0.0002		
2/6/2018		<0.0002	<0.0002			<0.0002	
2/7/2018							<0.0002
6/12/2018	0.011	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/23/2018	0.00829			<0.0002	<0.0002	<0.0002	<0.0002
10/24/2018		<0.0002	<0.0002				
5/21/2019	0.00722	<0.0002	<0.0002	<0.0002	0.00348 (J)		
5/22/2019						<0.0002	<0.0002
9/3/2019		<0.0002	<0.0002				
9/4/2019	0.00534			<0.0002	<0.0002	<0.0002	<0.0002
2/12/2020	0.0062	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/8/2020		<0.0002					
9/9/2020	0.0046 (J)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4/13/2021	0.00427	8.71E-05 (J)	9.35E-05 (J)	0.00033	0.000189 (J)	0.000187 (J)	0.000134 (J)
10/4/2021	0.00335				0.00012 (J)	0.00016 (J)	
10/5/2021		7E-05 (J)	0.00011 (J)	0.00023			
10/6/2021							0.00032
4/12/2022							0.00028
4/13/2022	0.00248	<0.0002	9E-05 (J)	0.00021	0.00014 (J)	0.00014 (J)	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/24/2016						0.00112 (J)	
5/10/2016	<0.0002	<0.0002					
5/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
7/5/2016	<0.0002						
7/6/2016		<0.0002	<0.0002	<0.0002	<0.0002	0.00124 (J)	<0.0002
9/6/2016	<0.0002		<0.0002	<0.0002	<0.0002	0.00137 (J)	
9/7/2016		<0.0002					0.00101 (J)
11/8/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00162 (J)	0.00121 (J)
2/20/2017		<0.0002	<0.0002	<0.0002	<0.0002	0.00127 (J)	
2/21/2017	<0.0002						<0.0002
5/30/2017			<0.0002	<0.0002		0.00129 (J)	<0.0002
5/31/2017	<0.0002	<0.0002			<0.0002		
7/5/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00116 (J)	<0.0002
2/5/2018	<0.0002						
2/6/2018		<0.0002	<0.0002	<0.0002	<0.0002	0.00131 (J)	<0.0002
6/11/2018			0.00119 (J)	<0.0002	<0.0002		
6/12/2018	<0.0002	<0.0002				0.00115 (J)	<0.0002
10/22/2018	<0.0002		0.00188 (J)	<0.0002	<0.0002	0.0015 (J)	<0.0002
10/23/2018		<0.0002					
5/20/2019	<0.0002		0.00259 (J)	<0.0002	<0.0002		
5/21/2019						0.00128 (J)	<0.0002
5/22/2019		<0.0002					
9/3/2019						0.00118 (J)	<0.0002
9/4/2019	<0.0002	<0.0002	0.00305 (J)	<0.0002	<0.0002		
2/11/2020			<0.0002	<0.0002	0.001 (J)		
2/12/2020	<0.0002	<0.0002				0.00133 (J)	<0.0002
9/8/2020			<0.0002	<0.0002			<0.0002
9/9/2020	<0.0002	<0.0002			<0.0002	0.00126 (J)	
4/13/2021	0.000123 (J)	0.00011 (J)	0.000587	9.88E-05 (J)	0.000469	0.00134	0.000237
10/4/2021	0.00017 (J)	<0.0002	0.00057	8E-05 (J)	0.00029	0.00135	
10/5/2021							0.00014 (J)
4/12/2022	0.0001 (J)	<0.0002	0.0009	0.00011 (J)	0.00043	0.00124	0.00018 (J)

# Time Series

Constituent: Barium (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			0.00756 (J)	0.0224			
3/24/2016	1.43	0.0339			0.0432		
5/10/2016	1.83			0.0232	0.0609		
5/11/2016		0.0375	0.00769 (J)				
7/5/2016	1.71					0.0375	
7/6/2016		0.0374	0.00975 (J)	0.0199	0.0542		0.014
8/23/2016						0.0353	0.00858 (J)
9/6/2016	1.65	0.0331		0.0195	0.0544		
9/7/2016			0.0101			0.0365	0.00994 (J)
11/8/2016	1.6				0.0491	0.0393	0.0108
11/9/2016		0.0367	0.00934 (J)	0.017			
1/3/2017						0.0373	0.00989 (J)
2/20/2017							0.00932 (J)
2/21/2017		0.0335	0.00713 (J)	0.0214		0.0262	
2/22/2017	1.53				0.0537		
5/31/2017	1.66	0.0314	0.00552 (J)	0.0223	0.0452	0.0305	0.00876 (J)
7/5/2017	1.66	0.0321	0.00664 (J)	0.022	0.0461	0.0245	0.00935 (J)
2/5/2018	1.8			0.0254	0.0469		
2/6/2018		0.0337	0.00614 (J)			0.034	
2/7/2018							0.00897 (J)
6/12/2018	2.32	0.0342	0.00637 (J)	0.023	0.0469	0.0291	0.0112
10/23/2018	2.22			0.0176	0.0457	0.032	0.00948 (J)
10/24/2018		0.0393	0.00522 (J)				
5/21/2019	2.51	0.0323	0.0056 (J)	0.0214	0.0697		
5/22/2019						0.0257	0.00958 (J)
9/3/2019		0.0377	0.00656 (J)				
9/4/2019	1.96			0.0205	0.0455	0.0303	0.00964 (J)
2/12/2020	2.15	0.0344	0.00444 (J)	0.024	0.0419	0.0239	0.0088 (J)
9/8/2020		0.0331					
9/9/2020	2.5		0.00545 (J)	0.0182	0.039	0.0262	0.00706 (J)
4/13/2021	2.41	0.0373	0.00636	0.0234	0.0403	0.0217	0.00801
10/4/2021	1.92				0.0369	0.024	
10/5/2021		0.0359	0.00871	0.0212			
10/6/2021							0.00769
4/12/2022							0.00927
4/13/2022	2.68	0.0403	0.0162	0.0272	0.0415	0.0217	

# Time Series

Constituent: Barium (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	0.0389	0.0597	0.0333	0.0149	0.02		0.0252
3/24/2016						0.0249	
5/10/2016	0.0552	0.0622					
5/11/2016			0.0378	0.0168	0.0221	0.0291	0.0327
7/5/2016	0.0329						
7/6/2016		0.0512	0.0456	0.0166	0.0227	0.0317	0.0342
9/6/2016	0.0297		0.0378	0.0144	0.0204	0.0312	
9/7/2016		0.0453					0.0292
11/8/2016	0.0313	0.0423	0.039	0.015	0.0208	0.0349	0.0281
2/20/2017		0.0306	0.0337	0.0126	0.0193	0.0264	
2/21/2017	0.0396						0.0235
5/30/2017			0.0374	0.0146		0.027	0.0214
5/31/2017	0.0301	0.0347			0.0201		
7/5/2017	0.0274	0.0287	0.0361	0.0143	0.0181	0.0245	0.0213
2/5/2018	0.0325						
2/6/2018		0.0341	0.0418	0.0156	0.0183	0.0248	0.0232
6/11/2018			0.056	0.0155	0.0196		
6/12/2018	0.0286	0.0323				0.0299	0.0259
10/22/2018	0.0324		0.0711	0.0185	0.0228	0.0314	0.0265
10/23/2018		0.035					
5/20/2019	0.0256		0.0671	0.0156	0.0163		
5/21/2019						0.0264	0.0249
5/22/2019		0.0271					
9/3/2019						0.0314	0.0271
9/4/2019	0.0325	0.0358	0.0824	0.0176	0.0256		
2/11/2020			0.0513	0.0175	0.0194		
2/12/2020	0.0372	0.0257				0.0257	0.0214
9/8/2020			0.0464	0.0159			0.0234
9/9/2020	0.03	0.0273			0.0161	0.026	
4/13/2021	0.0371	0.0259	0.0478	0.0175	0.016	0.0262	0.0226
10/4/2021	0.0353	0.0232	0.0494	0.0161	0.0181	0.0265	
10/5/2021							0.0234
4/12/2022	0.034	0.0309	0.0666	0.0214	0.0192	0.0294	0.0252







# Time Series

Constituent: Boron (mg/L) Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			0.0309 (J)	0.0387 (J)			
3/24/2016	0.0311 (J)	<0.1015			<0.1015		
5/10/2016	0.0334 (J)			0.0384 (J)	<0.1015		
5/11/2016		<0.1015	0.0306 (J)				
7/5/2016	0.0359 (J)					<0.1015	
7/6/2016		<0.1015	0.0307 (J)	0.029 (J)	<0.1015		<0.1015
8/23/2016						<0.1015	<0.1015
9/6/2016	0.0316 (J)	<0.1015		0.0278 (J)	<0.1015		
9/7/2016			0.0319 (J)			<0.1015	<0.1015
11/8/2016	0.0361 (J)				<0.1015	<0.1015	<0.1015
11/9/2016		<0.1015	0.0362 (J)	0.0331 (J)			
1/3/2017						0.0211 (J)	<0.1015
2/20/2017							<0.1015
2/21/2017		<0.1015	0.0295 (J)	0.0323 (J)		<0.1015	
2/22/2017	0.028 (J)				<0.1015		
5/31/2017	0.0297 (J)	<0.1015	0.0312 (J)	0.0316 (J)	<0.1015	<0.1015	<0.1015
7/5/2017	0.0302 (J)	<0.1015	0.0315 (J)	0.0318 (J)	<0.1015	<0.1015	<0.1015
9/5/2017						<0.1015	<0.1015
9/7/2017	0.0345 (J)	<0.1015	0.0408 (J)	0.0338 (J)	<0.1015		
6/12/2018	0.0331 (J)	<0.1015	0.034 (J)	0.0305 (J)	<0.1015	<0.1015	<0.1015
10/23/2018	0.0345 (J)			0.0347 (J)	<0.1015	<0.1015	<0.1015
10/24/2018		<0.1015	0.0416 (J)				
5/21/2019	0.0376 (J)	<0.1015	0.0413 (J)	<0.1015	<0.1015		
5/22/2019						<0.1015	<0.1015
9/3/2019		<0.1015	0.0452 (J)				
9/4/2019	0.0363 (J)			<0.1015	<0.1015	<0.1015	<0.1015
2/12/2020	0.0349 (J)	<0.1015	0.043 (J)	<0.1015	<0.1015	<0.1015	<0.1015
9/8/2020		<0.1015					
9/9/2020	0.0366 (J)		0.044 (J)	<0.1015	<0.1015	<0.1015	<0.1015
4/13/2021	0.0306 (J)	<0.1015	0.0422 (J)	<0.1015	<0.1015	<0.1015	<0.1015
10/4/2021	0.0343 (J)				<0.1015	<0.1015	
10/5/2021		<0.1015	0.0472 (J)	<0.1015			
10/6/2021							<0.1015
4/12/2022							<0.1015
4/13/2022	0.0353 (J)	<0.1015	0.0565 (J)	<0.1015	<0.1015	<0.1015	

# Time Series

Constituent: Boron (mg/L) Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015		<0.1015
3/24/2016						<0.1015	
5/10/2016	<0.1015	<0.1015					
5/11/2016			<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
7/5/2016	<0.1015						
7/6/2016		<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
9/6/2016	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015	
9/7/2016		<0.1015					<0.1015
11/8/2016	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
2/20/2017		<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	
2/21/2017	<0.1015						<0.1015
5/30/2017			<0.1015	<0.1015		<0.1015	<0.1015
5/31/2017	<0.1015	<0.1015			<0.1015		
7/5/2017	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
9/5/2017	<0.1015	<0.1015					
9/7/2017			0.022 (J)	<0.1015	<0.1015	<0.1015	<0.1015
6/11/2018			0.0386 (J)	<0.1015	<0.1015		
6/12/2018	<0.1015	<0.1015				<0.1015	<0.1015
10/22/2018	<0.1015		0.0456 (J)	<0.1015	<0.1015	<0.1015	<0.1015
10/23/2018		<0.1015					
5/20/2019	<0.1015		0.0769 (J)	<0.1015	<0.1015		
5/21/2019						<0.1015	<0.1015
5/22/2019		<0.1015					
9/3/2019						<0.1015	<0.1015
9/4/2019	<0.1015	<0.1015	0.0641 (J)	<0.1015	<0.1015		
2/11/2020			0.0406 (J)	<0.1015	<0.1015		
2/12/2020	<0.1015	<0.1015				<0.1015	<0.1015
9/8/2020			0.0425 (J)	<0.1015			<0.1015
9/9/2020	<0.1015	<0.1015			<0.1015	<0.1015	
4/13/2021	<0.1015	<0.1015	0.0333 (J)	<0.1015	<0.1015	<0.1015	<0.1015
10/4/2021	<0.1015	<0.1015	0.0392 (J)	<0.1015	<0.1015	<0.1015	
10/5/2021							<0.1015
4/12/2022	<0.1015	<0.1015	0.0481 (J)	<0.1015	<0.1015	<0.1015	<0.1015





# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...
3/23/2016			14.8	70.2		
3/24/2016	36.9	90.3			79.9	
5/10/2016	37.9			65.6	77.6	
5/11/2016		91.1	11.5			
7/5/2016	35.3					50.8
7/6/2016		90.7	10.4	58.2	72	10.7
8/23/2016						51.7 7.34
9/6/2016	34.8	94.5		62.3	81.6	
9/7/2016			9.73			48.4 7.86
11/8/2016	34.3				83.8	50.7 8.94
11/9/2016		92.9	8.07	62.7		
1/3/2017						55.4 9.21
2/20/2017						8.53
2/21/2017		93.1	13.2	69.9		48
2/22/2017	35.9				86.4	
5/31/2017	34.3	86.6	8.56	66.5	84.1	45.4 7.02
7/5/2017	35.5	91.5	11.9	66.9	89.5	45.7 8.08
9/5/2017						48.5 7.44
9/7/2017	36.7	99	9.2	72.9	93.2	
6/12/2018	42.2	101	11.5	69.9	101	45.2 7.37
10/23/2018	38.9			64.3	97.6	44.4 5.94
10/24/2018		104	7.73			
5/21/2019	47.8	101	11.7	77.9	106	
5/22/2019						47.1 6.34
9/3/2019		102	8.9			
9/4/2019	41.4			74.2	93.7	47.4 6.07
2/12/2020	44.1	99.2	13.1	77.8	93.1	57.3 5.62
9/8/2020		99.9				
9/9/2020	44.5		9.3	77	88.7	46.7 4.73
4/13/2021	44	97.1	12.3	81.6	89.8	48.4 5.17
10/4/2021	45.4				92.2	48
10/5/2021		108	13.8	87.9		
10/6/2021						4.62
4/12/2022						4.59
4/13/2022	47.5	107	15	88	91.8	58.9

# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	75.3	106	48.1	1.32	59.1		45.9
3/24/2016						57.4	
5/10/2016	75.7	109					
5/11/2016			46	1.13	58.9	57	49.4
7/5/2016	78.8						
7/6/2016		98.7	52.1	1.18	60.8	56.7	56
9/6/2016	84.3		49.7	1.09	62.2	57.3	
9/7/2016		98.6					53.8
11/8/2016	87.2	99.7	54.3	1.32	63.9	59.4	64.3
2/20/2017		93.4	51.3	0.829	69.6	57.7	
2/21/2017	80						45.6
5/30/2017			50	0.743		52.5	45.8
5/31/2017	75.2	84.1			63		
7/5/2017	77.2	92.6	56.9	0.68	64.6	52.7	36.4
9/5/2017	77.5	86.1					
9/7/2017			66.5	0.825	70.5	58.4	53.5
6/11/2018			62.4	0.722	63.5		
6/12/2018	78.9	76.5				53.7	47.6
10/22/2018	96.9		60.6	0.79	70.3	55.4	52.4
10/23/2018		68.8					
5/20/2019	87.3		58.8	0.652	72.5		
5/21/2019						55.7	51.6
5/22/2019		53.1					
9/3/2019						57.4	60.3
9/4/2019	89.8	76.4	57.9	0.872	72		
2/11/2020			76.6	0.562	71.2		
2/12/2020	81.4	89.6				55.7	45.3
9/8/2020			83.9	0.652			57.5
9/9/2020	80.9	63.1			66.7	55.3	
4/13/2021	77.5	57.8	79.2	0.505	64.1	52.2	43.5
10/4/2021	85	43.7	81.6	0.53	70.4	55.1	
10/5/2021							54.6
4/12/2022	87.1	55.1	94.1	0.516	71.2	54.4	50.4

# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016			2.64	4.43			
3/24/2016	3.35	2.78			3.16		
5/10/2016	3.06			3.38	3.02		
5/11/2016		2.62	3.02				
7/5/2016	2.9					3.86	
7/6/2016		2.53	4.01	2.62	3.1		3.78
8/23/2016						4.69	3.47
9/6/2016	2.54	2.51		2.65	3.31		
9/7/2016			4.51			4.6	3.4
11/8/2016	2.34				3.32	4.68	3.29
11/9/2016		2.67	3.74	2.55			
1/3/2017						5.25	3.11
2/20/2017							2.7
2/21/2017		3.4	4.1	4.7		4.3	
2/22/2017	2.9				4.8		
5/31/2017	2.7	3.6	5.3	4.1	4	4.2	2.3
7/5/2017	2.2	2.7	4.6	3.2	3.6	3.4	2
9/5/2017						4.5	<2 (U*)
9/7/2017	<2 (U*)	<2 (U*)	6.5	<2 (U*)	4.5		
6/12/2018	2.4	2.8	8.8	3.1	3.5	3.6	2
10/23/2018	2.1			2.1	3.5	3.4	1.5 (J)
10/24/2018		2.9	7.2				
5/21/2019	2.6	2.98	10.4	3.02	3.3		
5/22/2019						2.89	1.75
9/3/2019		2.84	7.1				
9/4/2019	2.39			2.73	3.33	2.88	1.95
2/12/2020	2.36	2.86	7.16	4.21	4.1	2.4	1.8
9/8/2020		2.8					
9/9/2020	2.49		6.27	2.8	3.4	2.49	1.95
4/13/2021	2.54	3.07	9.8	3.97	3.56	2.56	1.86
10/4/2021	2.58				3.37	2.5	
10/5/2021		3.04	13.8	3.69			
10/6/2021							2.07
4/12/2022							1.88
4/13/2022	2.17	2.77	19.6	3.76	3.01	2.42	

# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	3.6	3.67	4.84	3.36	3.28		2.26
3/24/2016						1.73	
5/10/2016	4.18	3.34					
5/11/2016			4.19	3.04	3.08	1.68	2.26
7/5/2016	3.12						
7/6/2016		3.08	4.67	2.86	2.96	1.68	2.28
9/6/2016	3.21		4.23	2.92	2.97	1.7	
9/7/2016		2.95					2.32
11/8/2016	3.33	2.92	4.51	3.01	3.22	2.03	2.26
2/20/2017		3.3	5.8	3.7	4	2.3	
2/21/2017	4.6						2.9
5/30/2017			13	3.2		2.2	2.9
5/31/2017	3.8	2.9			4.3		
7/5/2017	3.4	2.6	17	2.8	3.4	1.6 (J)	2.7
9/5/2017	4.4	3.5					
9/7/2017			17	<2 (U*)	4	<2 (U*)	<2 (U*)
6/11/2018			14	2.7	3.6		
6/12/2018	3.4	3.1				1.9 (J)	2.6
10/22/2018	3.6		14	2.6	3.7	<2	2
10/23/2018		2.6					
5/20/2019	3.53		12.9	3.15	3.25		
5/21/2019						1.51	2.12
5/22/2019		2.83					
9/3/2019						1.64	2.26
9/4/2019	3.56	2.92	11.9	3.21	4.31		
2/11/2020			11.2	3.36	3.69		
2/12/2020	3.66	2.49				1.64	2.24
9/8/2020			11.7	3.29			2.06
9/9/2020	3.44	2.74			3.34	1.61	
4/13/2021	3.55	2.76	9.78	3.54	3.64	1.64	2.14
10/4/2021	3.59	2.88	9.45	3.61	3.48	1.76	
10/5/2021							2.16
4/12/2022	3.23	2.67	7.35	3.38	3.29	1.54	1.91



# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.00102	<0.00102			
3/24/2016	<0.00102	<0.00102			<0.00102		
5/10/2016	<0.00102			<0.00102	<0.00102		
5/11/2016		<0.00102	<0.00102				
7/5/2016	<0.00102					<0.00102	
7/6/2016		<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
8/23/2016						<0.00102	<0.00102
9/6/2016	<0.00102	<0.00102		<0.00102	<0.00102		
9/7/2016			<0.00102			<0.00102	<0.00102
11/8/2016	<0.00102				<0.00102	<0.00102	<0.00102
11/9/2016		<0.00102	<0.00102	<0.00102			
1/3/2017						<0.00102	<0.00102
2/20/2017							<0.00102
2/21/2017		<0.00102	<0.00102	<0.00102		<0.00102	
2/22/2017	<0.00102				<0.00102		
5/31/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
7/5/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
2/5/2018	<0.00102			<0.00102	<0.00102		
2/6/2018		<0.00102	<0.00102			<0.00102	
2/7/2018							<0.00102
6/12/2018	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/23/2018	<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
10/24/2018		<0.00102	<0.00102				
5/21/2019	<0.00102	<0.00102	<0.00102	<0.00102	0.002 (J)		
5/22/2019						<0.00102	<0.00102
9/3/2019		<0.00102	<0.00102				
9/4/2019	<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
2/12/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
9/8/2020		<0.00102					
9/9/2020	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
4/13/2021	<0.00102	<0.00102	<0.00102	<0.00102	0.000518 (J)	0.000697 (J)	0.000375 (J)
10/4/2021	0.00021 (J)				0.00055 (J)	0.00065 (J)	
10/5/2021		0.00023 (J)	0.0003 (J)	0.00029 (J)			
10/6/2021							<0.00102
4/12/2022							0.00023 (J)
4/13/2022	<0.00102	<0.00102	<0.00102	0.00021 (J)	0.00052 (J)	0.0007 (J)	

# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/24/2016						<0.00102	
5/10/2016	<0.00102	<0.00102					
5/11/2016			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
7/5/2016	<0.00102						
7/6/2016		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
9/6/2016	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102	
9/7/2016		<0.00102					<0.00102
11/8/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
2/20/2017		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
2/21/2017	<0.00102						<0.00102
5/30/2017			<0.00102	<0.00102		<0.00102	<0.00102
5/31/2017	<0.00102	<0.00102			<0.00102		
7/5/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
2/5/2018	<0.00102						
2/6/2018		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
6/11/2018			<0.00102	<0.00102	<0.00102		
6/12/2018	<0.00102	<0.00102				<0.00102	<0.00102
10/22/2018	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/23/2018		<0.00102					
5/20/2019	<0.00102		<0.00102	<0.00102	<0.00102		
5/21/2019						<0.00102	<0.00102
5/22/2019		<0.00102					
9/3/2019						<0.00102	<0.00102
9/4/2019	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
2/11/2020			<0.00102	<0.00102	<0.00102		
2/12/2020	<0.00102	<0.00102				<0.00102	<0.00102
9/8/2020			<0.00102	<0.00102			<0.00102
9/9/2020	<0.00102	<0.00102			<0.00102	<0.00102	
4/13/2021	0.000517 (J)	0.000337 (J)	<0.00102	0.000257 (J)	0.000361 (J)	0.000291 (J)	0.000276 (J)
10/4/2021	0.00061 (J)	0.00046 (J)	0.00028 (J)	0.00025 (J)	0.00056 (J)	0.00037 (J)	
10/5/2021							0.00021 (J)
4/12/2022	0.00052 (J)	0.00025 (J)	0.00029 (J)	0.00022 (J)	<0.00102	0.00035 (J)	<0.00102

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...
3/23/2016			0.00454 (J)	<0.0002		
3/24/2016	<0.0002	<0.0002			0.00662 (J)	
5/10/2016	<0.0002			<0.0002	0.00549 (J)	
5/11/2016		<0.0002	0.00407 (J)			
7/5/2016	<0.0002					<0.0002
7/6/2016		<0.0002	0.00654 (J)	<0.0002	0.00537 (J)	0.00313 (J)
8/23/2016						<0.0002
9/6/2016	<0.0002	<0.0002		<0.0002	0.00568 (J)	
9/7/2016			0.00737 (J)			<0.0002
11/8/2016	<0.0002				0.00388 (J)	<0.0002
11/9/2016		<0.0002	0.00732 (J)	<0.0002		
1/3/2017						<0.0002
2/20/2017						<0.0002
2/21/2017		<0.0002	0.00315 (J)	<0.0002		<0.0002
2/22/2017	<0.0002				0.00412 (J)	
5/31/2017	<0.0002	<0.0002	0.0023 (J)	<0.0002	<0.0002	<0.0002
7/5/2017	<0.0002	<0.0002	0.00303 (J)	<0.0002	<0.0002	<0.0002
2/5/2018	<0.0002			<0.0002	<0.0002	
2/6/2018		<0.0002	0.00324 (J)			<0.0002
2/7/2018						<0.0002
6/12/2018	<0.0002	<0.0002	0.00251 (J)	<0.0002	<0.0002	<0.0002
10/23/2018	<0.0002			<0.0002	<0.0002	<0.0002
10/24/2018		<0.0002	0.00286 (J)			
5/21/2019	<0.0002	<0.0002	0.00245 (J)	<0.0002	0.0578 (o)	
5/22/2019						<0.0002
9/3/2019		<0.0002	0.00298 (J)			<0.0002
9/4/2019	<0.0002			<0.0002	<0.0002	<0.0002
2/12/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/8/2020		<0.0002				
9/9/2020	<0.0002		0.00256 (J)	<0.0002	<0.0002	<0.0002
4/13/2021	<0.0002	<0.0002	0.00212	0.000218	0.000158 (J)	<0.0002
10/4/2021	<0.0002				0.0001 (J)	<0.0002
10/5/2021		<0.0002	0.00217	0.00042		
10/6/2021						0.0005
4/12/2022						0.00066
4/13/2022	<0.0002	<0.0002	0.00324	0.00016 (J)	<0.0002	<0.0002

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<0.0002	0.00232 (J)	0.00403 (J)	<0.0002	0.00656 (J)		<0.0002
3/24/2016						<0.0002	
5/10/2016	<0.0002	<0.0002					
5/11/2016			0.00289 (J)	<0.0002	0.00505 (J)	<0.0002	<0.0002
7/5/2016	<0.0002						
7/6/2016		<0.0002	0.00485 (J)	<0.0002	0.00515 (J)	<0.0002	<0.0002
9/6/2016	<0.0002		0.00281 (J)	<0.0002	0.0037 (J)	<0.0002	
9/7/2016		<0.0002					<0.0002
11/8/2016	<0.0002	<0.0002	0.0035 (J)	<0.0002	0.00375 (J)	<0.0002	<0.0002
2/20/2017		<0.0002	<0.0002	<0.0002	0.00263 (J)	<0.0002	
2/21/2017	<0.0002						<0.0002
5/30/2017			<0.0002	<0.0002		<0.0002	<0.0002
5/31/2017	<0.0002	<0.0002			0.00287 (J)		
7/5/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/5/2018	<0.0002						
2/6/2018		<0.0002	0.00274 (J)	<0.0002	<0.0002	<0.0002	<0.0002
6/11/2018			0.00472 (J)	<0.0002	<0.0002		
6/12/2018	<0.0002	<0.0002				<0.0002	<0.0002
10/22/2018	<0.0002		0.0049 (J)	<0.0002	<0.0002	<0.0002	<0.0002
10/23/2018		<0.0002					
5/20/2019	<0.0002		0.00489 (J)	<0.0002	<0.0002		
5/21/2019						<0.0002	<0.0002
5/22/2019		<0.0002					
9/3/2019						<0.0002	<0.0002
9/4/2019	<0.0002	<0.0002	0.00527	<0.0002	0.00217 (J)		
2/11/2020			<0.0002	<0.0002	<0.0002		
2/12/2020	<0.0002	<0.0002				<0.0002	<0.0002
9/8/2020			<0.0002	<0.0002			<0.0002
9/9/2020	<0.0002	<0.0002			<0.0002	<0.0002	
4/13/2021	<0.0002	<0.0002	0.00104	0.000682	0.00077	0.000123 (J)	8.16E-05 (J)
10/4/2021	<0.0002	<0.0002	0.00142	0.00065	0.00033	0.00014 (J)	
10/5/2021							0.00041
4/12/2022	<0.0002	<0.0002	0.00215	0.00066	0.0006	7E-05 (J)	<0.0002

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016			<3	<3			
3/24/2016	<3	<3			<3		
5/10/2016	0.904			0.0311 (U)	-0.0573 (U)		
5/11/2016		0.197 (U)	0.0833 (U)				
7/5/2016	0.971					0.385 (U)	
7/6/2016		-0.0714 (U)	0.0827 (U)	0.359 (U)	0.607		0.563
8/23/2016						0.411 (U)	0.352 (U)
9/6/2016	1.09	0.59 (U)		1.03 (U)	0.47 (U)		
9/7/2016			2.13			0.88	1.08
11/8/2016	1.13				0.177 (U)	0.791	0.908
11/9/2016		0.621 (U)	0.419 (U)	1.22			
1/3/2017						0.412 (U)	0.661
2/20/2017							0.155 (U)
2/21/2017		1.01	1.19	0.0581 (U)		0.746	
2/22/2017					0.783		
3/1/2017	0.736						
5/31/2017	0.961	0.191 (U)	0.215 (U)	0.186 (U)	0.153 (U)	0.115 (U)	-0.105 (U)
7/5/2017	1.1	0.166 (U)	0.289 (U)	0.245 (U)	0.444	0.152 (U)	0.372
2/5/2018	0.596			0.321 (U)	-0.0362 (U)		
2/6/2018		0.275 (U)	-0.183 (U)			0.308 (U)	
2/7/2018							0.0874 (U)
6/12/2018	0.89	0.218 (U)	0.569	0.321 (U)	-0.0382 (U)	0.672	0.446
10/23/2018	1.14			0.723	1.04	0.248 (U)	0.829
10/24/2018		1.4	0.898				
5/21/2019	1.38	5.12 (U)	0.0995 (U)	0.376 (U)	0.503 (U)		
5/22/2019						0.24 (U)	0.588
9/3/2019		0.793	3.47				
9/4/2019	2.39			0.534	3.92	2.02	1.06
2/12/2020	1.17	0.13 (U)	0.0433 (U)	0.836	0.799	0.79	0.297 (U)
9/8/2020		0.65 (U)					
9/9/2020	1.02		0.798	1.88	0.27 (U)	0.453 (U)	0.258 (U)
4/13/2021	0.909 (U)	0.531 (U)	0.589 (U)	0.592 (U)	0.667 (U)	0.788 (U)	0.452 (U)
10/4/2021	1.43				0.231 (U)	0.573 (U)	
10/5/2021		0.269 (U)	0.524 (U)	1.42			
10/6/2021							1.33
4/12/2022							0.336 (U)
4/13/2022	1.31	0.551 (U)	0.453 (U)	0.257 (U)	0.357 (U)	0.127 (U)	

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<3	<3	<3	<3	<3		<3
3/24/2016						<3	
5/10/2016	0.24 (U)	0.94					
5/11/2016			0.0157 (U)	0.222 (U)	0.329 (U)	0.202 (U)	0.903 (U)
7/5/2016	0.225 (U)						
7/6/2016		0.878	0.648	0.375 (U)	-0.129 (U)	0.291 (U)	0.19 (U)
9/6/2016	0.0553 (U)		0.633	0.607 (U)	0.858	-0.0526 (U)	
9/7/2016		1.45					0.458 (U)
11/8/2016	0.614 (U)	1.48	0.67	1.36	0.49 (U)	0.364 (U)	1.25
2/20/2017		0.755	0.073 (U)	0.524	0.506	0.174 (U)	
2/21/2017	1.6						0.657
5/30/2017			0.646	-0.1 (U)		0.368 (U)	0.373 (U)
5/31/2017	0.0999 (U)	0.91			0.272 (U)		
7/5/2017	0.241 (U)	0.154 (U)	0.16 (U)	0.376 (U)	0.216 (U)	0.224 (U)	0.415
2/5/2018	0.206 (U)						
2/6/2018		0.111 (U)	0.0645 (U)	-0.14 (U)	0.168 (U)	-0.011 (U)	0.328 (U)
6/11/2018			0.577	0.436	0.199 (U)		
6/12/2018	0.592	0.289 (U)				0.324 (U)	0.141 (U)
10/22/2018	0.351 (U)		1.16	1.07	1.03	0.748	0.21 (U)
10/23/2018		0.879					
5/20/2019	0.435		-0.251 (U)	0.498	0.465		
5/21/2019						0.21 (U)	0.289 (U)
5/22/2019		0.643 (U)					
9/3/2019						0.983	0.994
9/4/2019	0.347 (U)	2.36	1.05	0.608	1.28		
2/11/2020			0.585	0.743	0.513 (U)		
2/12/2020	0.419 (U)	0.444 (U)				-0.0587 (U)	0.377 (U)
9/8/2020			0.921	-0.109 (U)			1.07
9/9/2020	0.611 (U)	1.02			0.382 (U)	0.287 (U)	
4/13/2021	0.258 (U)	0.652 (U)	0.434 (U)	0.611 (U)	0.492 (U)	0.391 (U)	0.592 (U)
10/4/2021	1.1 (U)	1.22 (U)	0.11 (U)	1.7	0.144 (U)	0.794 (U)	
10/5/2021							0.2 (U)
4/12/2022	0.535 (U)	0.319 (U)	0.739 (U)	0.157 (U)	0.0248 (U)	0.367 (U)	0.191 (U)

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			0.02 (J)	0.058 (J)			
3/24/2016	0.325	0.02 (J)			0.039 (J)		
5/10/2016	0.33			0.095 (J)	0.085 (J)		
5/11/2016		0.062 (J)	0.063 (J)				
7/5/2016	0.325					0.072 (J)	
7/6/2016		0.051 (J)	0.053 (J)	0.069 (J)	0.075 (J)		0.062 (J)
8/23/2016						0.066 (J)	0.045 (J)
9/6/2016	0.315	0.037 (J)		0.055 (J)	0.058 (J)		
9/7/2016			0.041 (J)			0.062 (J)	0.042 (J)
11/8/2016	0.227 (J)				0.3 (U)	<0.125	<0.125
11/9/2016		0.3 (U)	<0.125	<0.125			
1/3/2017						<0.125	<0.125
2/20/2017							0.1
2/21/2017		0.1	0.1	0.05 (J)		0.1	
2/22/2017	0.34				0.04 (J)		
5/31/2017	0.3	0.1	0.1	0.06 (J)	0.04 (J)	0.06 (J)	0.1
7/5/2017	0.3	<0.125	<0.125	0.05 (J)	0.04 (J)	0.04 (J)	<0.125
9/5/2017						0.06 (J)	<0.125
9/7/2017	0.37	<0.125	0.04 (J)	0.06 (J)	0.05 (J)		
2/5/2018	0.37			0.08 (J)	0.04 (J)		
2/6/2018		<0.125	<0.125			0.06 (J)	
2/7/2018							<0.125
6/12/2018	0.32	<0.125	<0.125	0.06 (J)	0.04 (J)	0.05 (J)	<0.125
10/23/2018	0.39			0.06 (J)	0.05 (J)	0.07 (J)	<0.125
10/24/2018		<0.125	<0.125				
5/21/2019	0.264	<0.125	<0.125	0.0649 (J)	0.0595 (J)		
5/22/2019						0.0601 (J)	<0.125
9/3/2019		<0.125	<0.125				
9/4/2019	0.33			0.0547 (J)	0.0555 (J)	0.0703 (J)	<0.125
2/12/2020	0.301	<0.125	<0.125	0.0586 (J)	<0.125	<0.125	<0.125
9/8/2020		0.0617 (J)					
9/9/2020	0.313		<0.125	0.068 (J)	0.0655 (J)	0.0847 (J)	<0.125
4/13/2021	0.29	<0.125	<0.125	<0.125	0.0633 (J)	<0.125	<0.125
10/4/2021	0.376				0.0748 (J)	0.0838 (J)	
10/5/2021		<0.125	<0.125	<0.125			
10/6/2021							<0.125
4/12/2022							<0.125
4/13/2022	0.307	<0.125	<0.125	<0.125	<0.125	<0.125	

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	0.022 (J)	0.06 (J)	0.028 (J)	<0.125	0.063 (J)		0.035 (J)
3/24/2016						0.132 (J)	
5/10/2016	0.068 (J)	0.111 (J)					
5/11/2016			0.074 (J)	0.055 (J)	0.105 (J)	0.176 (J)	0.08 (J)
7/5/2016	0.052 (J)						
7/6/2016		0.089 (J)	0.065 (J)	0.047 (J)	0.094 (J)	0.167 (J)	0.072 (J)
9/6/2016	0.038 (J)		0.052 (J)	0.036 (J)	0.08 (J)	0.153 (J)	
9/7/2016		0.073 (J)					0.057 (J)
11/8/2016	<0.125	<0.125	<0.125	<0.125	<0.125	0.043 (J)	<0.125
2/20/2017		0.05 (J)	0.1	0.1	0.09 (J)	0.15	
2/21/2017	0.1						0.1
5/30/2017			0.04 (J)	0.1		0.14	0.04 (J)
5/31/2017	0.1	0.06 (J)			0.08 (J)		
7/5/2017	<0.125	0.05 (J)	<0.125	<0.125	0.08 (J)	0.13	<0.125
9/5/2017	<0.125	0.06 (J)					
9/7/2017			<0.125	<0.125	0.09 (J)	0.13	0.04 (J)
2/5/2018	0.04 (J)						
2/6/2018		0.06 (J)	<0.125	<0.125	0.08 (J)	0.15	0.04 (J)
6/11/2018			0.04 (J)	<0.125	0.09 (J)		
6/12/2018	<0.125	0.05 (J)				0.13	0.04 (J)
10/22/2018	<0.125		0.06 (J)	<0.125	0.1	0.15	0.05 (J)
10/23/2018		0.05 (J)					
5/20/2019	<0.125		0.0842 (J)	<0.125	0.0919 (J)		
5/21/2019						0.109	0.0526 (J)
5/22/2019		0.0515 (J)					
9/3/2019						0.123	0.0554 (J)
9/4/2019	<0.125	0.0594 (J)	0.0962 (J)	<0.125	0.07 (J)		
2/11/2020			<0.125	<0.125	0.0912 (J)		
2/12/2020	<0.125	0.0566 (J)				0.108	<0.125
9/8/2020			<0.125	<0.125			0.097 (J)
9/9/2020	0.0644 (J)	0.0748 (J)			0.118	0.14	
4/13/2021	<0.125	0.069 (J)	<0.125	<0.125	0.129	0.119	0.0602 (J)
10/4/2021	0.0664 (J)	0.0637 (J)	<0.125	<0.125	0.12	0.134	
10/5/2021							<0.125
4/12/2022	<0.125	<0.125	<0.125	<0.125	0.0724 (J)	0.0621 (J)	<0.125



# Time Series

Constituent: Lead (mg/L) Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...
3/23/2016			<0.0002	<0.0002		
3/24/2016	<0.0002	<0.0002			<0.0002	
5/10/2016	<0.0002			<0.0002	<0.0002	
5/11/2016		<0.0002	<0.0002			
7/5/2016	<0.0002					<0.0002
7/6/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/23/2016						<0.0002
9/6/2016	<0.0002	<0.0002		<0.0002	<0.0002	
9/7/2016			<0.0002			<0.0002
11/8/2016	<0.0002				<0.0002	<0.0002
11/9/2016		<0.0002	<0.0002	<0.0002		
1/3/2017						<0.0002
2/20/2017						<0.0002
2/21/2017		<0.0002	<0.0002	<0.0002		<0.0002
2/22/2017	<0.0002				<0.0002	
5/31/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
7/5/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/5/2018	<0.0002			<0.0002	<0.0002	
2/6/2018		<0.0002	<0.0002			<0.0002
2/7/2018						<0.0002
6/12/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/23/2018	<0.0002			<0.0002	<0.0002	<0.0002
10/24/2018		<0.0002	<0.0002			
5/21/2019	<0.0002	<0.0002	<0.0002	<0.0002	0.00228 (J)	
5/22/2019						<0.0002
9/3/2019		<0.0002	<0.0002			<0.0002
9/4/2019	<0.0002			<0.0002	<0.0002	<0.0002
2/12/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/8/2020		<0.0002				
9/9/2020	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
4/13/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/4/2021	<0.0002				<0.0002	<0.0002
10/5/2021		<0.0002	<0.0002	<0.0002		
10/6/2021						<0.0002
4/12/2022						0.00023
4/13/2022	<0.0002	<0.0002	0.00011 (J)	<0.0002	<0.0002	<0.0002

# Time Series

Constituent: Lead (mg/L) Analysis Run 5/31/2022 10:24 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/24/2016						<0.0002	
5/10/2016	<0.0002	<0.0002					
5/11/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
7/5/2016	<0.0002						
7/6/2016		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/6/2016	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	
9/7/2016		<0.0002					<0.0002
11/8/2016	<0.0002	<0.0002	<0.0002	<0.0002	0.00229 (J)	<0.0002	<0.0002
2/20/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
2/21/2017	<0.0002						<0.0002
5/30/2017			<0.0002	<0.0002		<0.0002	<0.0002
5/31/2017	<0.0002	<0.0002			<0.0002		
7/5/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/5/2018	<0.0002						
2/6/2018		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
6/11/2018			<0.0002	<0.0002	<0.0002		
6/12/2018	<0.0002	<0.0002				<0.0002	<0.0002
10/22/2018	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/23/2018		<0.0002					
5/20/2019	<0.0002		<0.0002	<0.0002	<0.0002		
5/21/2019						<0.0002	<0.0002
5/22/2019		<0.0002					
9/3/2019						<0.0002	<0.0002
9/4/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
2/11/2020			<0.0002	<0.0002	<0.0002		
2/12/2020	<0.0002	<0.0002				<0.0002	<0.0002
9/8/2020			<0.0002	<0.0002			<0.0002
9/9/2020	<0.0002	<0.0002			<0.0002	<0.0002	
4/13/2021	<0.0002	<0.0002	<0.0002	0.000305	<0.0002	<0.0002	<0.0002
10/4/2021	<0.0002	<0.0002	<0.0002	0.00031	<0.0002	<0.0002	
10/5/2021							<0.0002
4/12/2022	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	0.00011 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.02	<0.02			
3/24/2016	<0.02	<0.02			<0.02		
5/10/2016	<0.02			<0.02	<0.02		
5/11/2016		<0.02	<0.02				
7/5/2016	<0.02					<0.02	
7/6/2016		<0.02	<0.02	<0.02	<0.02		<0.02
8/23/2016						<0.02	<0.02
9/6/2016	<0.02	<0.02		<0.02	<0.02		
9/7/2016			<0.02			<0.02	<0.02
11/8/2016	<0.02				<0.02	<0.02	<0.02
11/9/2016		<0.02	<0.02	<0.02			
1/3/2017						<0.02	<0.02
2/20/2017							<0.02
2/21/2017		<0.02	<0.02	<0.02		<0.02	
2/22/2017	<0.02				<0.02		
5/31/2017	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
7/5/2017	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2/5/2018	<0.02			<0.02	<0.02		
2/6/2018		<0.02	<0.02			<0.02	
2/7/2018							<0.02
6/12/2018	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
10/23/2018	<0.02			<0.02	<0.02	<0.02	<0.02
10/24/2018		<0.02	<0.02				
5/21/2019	<0.02	<0.02	<0.02	<0.02	<0.02		
5/22/2019						<0.02	<0.02
9/3/2019		<0.02	<0.02				
9/4/2019	<0.02			<0.02	<0.02	<0.02	<0.02
2/12/2020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
9/8/2020		<0.02					
9/9/2020	0.0101 (J)		<0.02	<0.02	<0.02	<0.02	<0.02
4/13/2021	0.00953 (J)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
10/4/2021	0.00963 (J)				<0.02	<0.02	
10/5/2021		<0.02	<0.02	<0.02			
10/6/2021							<0.02
4/12/2022							<0.02
4/13/2022	0.00966 (J)	<0.02	<0.02	<0.02	<0.02	<0.02	







# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.0002	<0.0002			
3/24/2016	0.0241	<0.0002			<0.0002		
5/10/2016	0.0239			<0.0002	<0.0002		
5/11/2016		<0.0002	<0.0002				
7/5/2016	0.0176					<0.0002	
7/6/2016		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
8/23/2016						<0.0002	<0.0002
9/6/2016	0.0138	<0.0002		<0.0002	<0.0002		
9/7/2016			<0.0002			<0.0002	<0.0002
11/8/2016	0.0102				<0.0002	<0.0002	<0.0002
11/9/2016		<0.0002	<0.0002	<0.0002			
1/3/2017						<0.0002	<0.0002
2/20/2017							<0.0002
2/21/2017		<0.0002	<0.0002	<0.0002		<0.0002	
2/22/2017	0.0102				<0.0002		
5/31/2017	0.00805 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
7/5/2017	0.009 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/5/2018	0.00908 (J)			<0.0002	<0.0002		
2/6/2018		<0.0002	<0.0002			<0.0002	
2/7/2018							<0.0002
6/12/2018	0.00655 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/23/2018	0.006 (J)			<0.0002	<0.0002	<0.0002	<0.0002
10/24/2018		<0.0002	<0.0002				
5/21/2019	0.00504 (J)	<0.0002	<0.0002	<0.0002	<0.0002		
5/22/2019						<0.0002	<0.0002
9/3/2019		<0.0002	<0.0002				
9/4/2019	0.00504 (J)			<0.0002	<0.0002	<0.0002	<0.0002
2/12/2020	0.00448 (J)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/8/2020		<0.0002					
9/9/2020	0.00405 (J)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
4/13/2021	0.00353	<0.0002	<0.0002	0.000298	0.000175 (J)	0.000334	<0.0002
10/4/2021	0.00372				0.00016 (J)	0.00046	
10/5/2021		<0.0002	<0.0002	0.00033			
10/6/2021							<0.0002
4/12/2022							<0.0002
4/13/2022	0.0033	<0.0002	<0.0002	0.00031	0.00021	0.00025	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
3/24/2016						0.00317 (J)	
5/10/2016	<0.0002	<0.0002					
5/11/2016			<0.0002	<0.0002	<0.0002	0.00424 (J)	<0.0002
7/5/2016	<0.0002						
7/6/2016		<0.0002	<0.0002	<0.0002	<0.0002	0.00489 (J)	<0.0002
9/6/2016	<0.0002		<0.0002	<0.0002	<0.0002	0.00466 (J)	
9/7/2016		<0.0002					<0.0002
11/8/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00422 (J)	<0.0002
2/20/2017		<0.0002	<0.0002	<0.0002	<0.0002	0.00422 (J)	
2/21/2017	<0.0002						<0.0002
5/30/2017			<0.0002	<0.0002		0.00344 (J)	<0.0002
5/31/2017	<0.0002	<0.0002			<0.0002		
7/5/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00369 (J)	<0.0002
2/5/2018	<0.0002						
2/6/2018		<0.0002	<0.0002	<0.0002	<0.0002	0.00331 (J)	<0.0002
6/11/2018			<0.0002	<0.0002	<0.0002		
6/12/2018	<0.0002	<0.0002				0.00325 (J)	<0.0002
10/22/2018	<0.0002		<0.0002	<0.0002	<0.0002	0.00359 (J)	<0.0002
10/23/2018		<0.0002					
5/20/2019	<0.0002		<0.0002	<0.0002	<0.0002		
5/21/2019						0.00379 (J)	<0.0002
5/22/2019		<0.0002					
9/3/2019						0.00437 (J)	<0.0002
9/4/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
2/11/2020			<0.0002	<0.0002	<0.0002		
2/12/2020	<0.0002	<0.0002				0.00322 (J)	<0.0002
9/8/2020			<0.0002	<0.0002			<0.0002
9/9/2020	<0.0002	<0.0002			<0.0002	0.00418 (J)	
4/13/2021	0.000307	7.49E-05 (J)	9.4E-05 (J)	<0.0002	0.000276	0.00318	0.000207
10/4/2021	0.00034	<0.0002	9E-05 (J)	<0.0002	0.00025	0.00345	
10/5/2021							0.00032
4/12/2022	0.00026	<0.0002	0.00012 (J)	<0.0002	0.00027	0.00347	0.00021



# Time Series

Constituent: pH (pH) Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016			6.26	7.28			
3/24/2016	7.7	6.95			7.14		
5/10/2016	7.67			7.19	7.17		
5/11/2016		7.07	6.04				
7/5/2016	7.68					7.44	
7/6/2016		7.13	6	7.29	7.19		6.1
8/23/2016						7.47	5.87
9/6/2016	7.8	7.1		7.29	7.18		
9/7/2016			6.1			7.51	5.92
11/8/2016	7.74				7.18	7.37	5.91
11/9/2016		7.1	5.85	7.29			
1/3/2017						7.37	5.93
2/20/2017							5.91
2/21/2017		7	5.99	7.1		7.41	
2/22/2017	7.61				7.02		
5/31/2017	7.7	7.01	6.03	7.16	7.07	7.47	6
7/5/2017	7.66	7.07	6.13	7.08	7	7.5	6
9/5/2017						7.39	5.9
9/7/2017	7.7	7.01	6.17	7.17	7.02		
2/5/2018	7.78			7.22	7.12		
2/6/2018		7.09	6.17			7.47	
2/7/2018							5.86
6/12/2018	7.62	7.07	6.13	7.19	7.09	7.53	6.05
10/23/2018	7.65			7.22	7.09	7.4	5.84
10/24/2018		7.14	6.09				
5/21/2019	7.5	6.98	5.97	7.1	7.05		
5/22/2019						7.43	5.81
9/3/2019		6.67	5.12				
9/4/2019	7.4			7.24	6.71	7.45	5.67
2/12/2020	7.66	7.03	6	7.14	7.09	7.47	5.72
9/8/2020		5.9					
9/9/2020	7.6		5.67	6.77	6.95	7.32	5.71
4/13/2021	7.7	7.22	5.46	6.61	7.17	7.33	5.84
10/4/2021	7.33				6.95	7.21	
10/5/2021		7.12	6.01	7.25			
10/6/2021							5.64
4/12/2022							5.25
4/13/2022	7.5	6.85	5.29	6.74	6.84	7.4	

# Time Series

Constituent: pH (pH) Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	7.18	6.83	6.41	4.91	6.5		6.88
3/24/2016						7.45	
5/10/2016	7.2	6.84					
5/11/2016			6.5	4.79	6.54	7.48	6.84
7/5/2016	7.15						
7/6/2016		6.94	6.47	4.66	6.58	7.46	7.01
9/6/2016	7.17		6.51	4.8	6.64	7.44	
9/7/2016		6.84					7.03
11/8/2016	7.12	6.84	6.48	4.81	6.61	7.37	7.15
2/20/2017		7.04	6.39	4.51	6.63	7.36	
2/21/2017	7.12						6.67
5/30/2017			6.38	4.61		7.38	6.91
5/31/2017	7.17	6.91			6.54		
7/5/2017	7.18	7.02	6.44	4.64	6.67	7.44	6.51
9/5/2017	7.17	6.78					
9/7/2017			6.44	4.67	6.69	7.41	6.96
2/5/2018	7.12						
2/6/2018		6.96	6.36	4.61	6.71	7.41	6.8
6/11/2018			6.43	4.68	6.7		
6/12/2018	7.19	6.76				7.4	6.77
10/22/2018	7.06		6.48	4.68	6.71	7.33	6.86
10/23/2018		6.59					
5/20/2019	7.13		6.59	4.59	6.81		
5/21/2019						7.31	6.79
5/22/2019		6.38					
9/3/2019						7.46	6.53
9/4/2019	7.16	6.71	6.81	4.59	6.78		
2/11/2020			6.42	4.59	6.72		
2/12/2020	7.11	6.98				7.51	6.57
9/8/2020			6.2	6			5.85
9/9/2020	7.22	6.48			6.86	7.54	
4/13/2021	6.94	6.71	6.36	4.63	6.84	7.7	6.9
10/4/2021	7.13	6.43	6.66	4.86	6.96	7.82	
10/5/2021							6.96
4/12/2022	6.48	5.57	6.32	4.38	6.73	7.22	6.22



# Time Series

Constituent: Selenium (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
3/24/2016						<0.00102	
5/10/2016	<0.00102	<0.00102					
5/11/2016			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
7/5/2016	<0.00102						
7/6/2016		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
9/6/2016	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102	
9/7/2016		<0.00102					<0.00102
11/8/2016	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
2/20/2017		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
2/21/2017	<0.00102						<0.00102
5/30/2017			<0.00102	<0.00102		<0.00102	<0.00102
5/31/2017	<0.00102	<0.00102			<0.00102		
7/5/2017	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
2/5/2018	<0.00102						
2/6/2018		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
6/11/2018			<0.00102	<0.00102	<0.00102		
6/12/2018	<0.00102	<0.00102				<0.00102	<0.00102
10/22/2018	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/23/2018		<0.00102					
5/20/2019	<0.00102		<0.00102	<0.00102	<0.00102		
5/21/2019						<0.00102	<0.00102
5/22/2019		<0.00102					
9/3/2019						<0.00102	<0.00102
9/4/2019	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
2/11/2020			<0.00102	<0.00102	<0.00102		
2/12/2020	<0.00102	<0.00102				<0.00102	<0.00102
9/8/2020			<0.00102	<0.00102			<0.00102
9/9/2020	<0.00102	<0.00102			<0.00102	<0.00102	
4/13/2021	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/4/2021	<0.00102	0.0006 (J)	<0.00102	<0.00102	<0.00102	<0.00102	
10/5/2021							<0.00102
4/12/2022	<0.00102	0.00051 (J)	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016			7.59	16.2			
3/24/2016	6.06	1.62			7.64		
5/10/2016	5.47			12.1	6.79		
5/11/2016		2.15	6.6				
7/5/2016	4.8					11.7	
7/6/2016		1.89	11.8	7.7	7.59		5.38
8/23/2016						13.7	4.23
9/6/2016	3.91	1.53		6.97	9.56		
9/7/2016			14.9			12.4	3.84
11/8/2016	2.95				8.87	12.9	3.23
11/9/2016		1.69	4.5	5.77			
1/3/2017						14.1	3
2/20/2017							3.1 (J)
2/21/2017		2.2 (J)	5.7	12		6.1	
2/22/2017	3.3 (J)				10		
5/31/2017	3.4 (J)	1.7 (J)	5.6	8.7	8	8	2.1 (J)
7/5/2017	3.4 (J)	<1	4.6 (J)	7.7	8.2	3.8 (J)	2 (J)
9/5/2017						6.8	2.2 (J)
9/7/2017	3.6 (J)	1.7 (J)	6.2	7	8.3		
6/12/2018	4.2 (J)	1.8 (J)	3.5 (J)	8.7	8.3	5	2.3 (J)
10/23/2018	3 (J)			4.8 (J)	6.7	5.4	<1
10/24/2018		<1	2.4 (J)				
5/21/2019	4.58	1.72	3.55	7.81	8.29		
5/22/2019						5.57	2.82
9/3/2019		1.73	2.83				
9/4/2019	4.82			6.25	8.18	6.37	2.3
2/12/2020	5.11	1.65	3.89	13.1	9.06	3.09	1.77
9/8/2020		1.62					
9/9/2020	3.97		3.01	5.85	7.89	5.26	2
4/13/2021	4.43	1.68	2.77	8.86	8.38	3.45	2.51
10/4/2021	4.08				7.18	3.78	
10/5/2021		1.8	2.86	8.02			
10/6/2021							2.15
4/12/2022							1.76 (J)
4/13/2022	4.24	1.68 (J)	2.73	8.25	7.27	2.44	

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:24 AM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	6.48	32.6	14.1	1.89	13.8		5.54
3/24/2016						2.42	
5/10/2016	11.1	27.6					
5/11/2016			13.5	1.79	11.9	2.16	5.66
7/5/2016	6.7						
7/6/2016		23.6	17.1	1.3	11.1	1.7	5.62
9/6/2016	6.85		11.2	1.14	10.6	1.31	
9/7/2016		22.2					5.31
11/8/2016	7.3	20.4	10.9	0.622 (J)	12.1	1.4	4.42
2/20/2017		14	8.8	5 (o)	9.7	2 (J)	
2/21/2017	7.7						5.3
5/30/2017			12	5 (o)		1.6 (J)	5.2
5/31/2017	5.3	15			11		
7/5/2017	6.4	11	19	<1	8.3	1.9 (J)	4.4 (J)
9/5/2017	6.1	17					
9/7/2017			33	<1	8.6	2.1 (J)	5.9
6/11/2018			47	<1	7.5		
6/12/2018	7.2	14				2.7 (J)	5.7
10/22/2018	8.3		40	<1	8.8	2.2 (J)	5.1
10/23/2018		12					
5/20/2019	7.52		75.6	<1	6.85		
5/21/2019						3.39	6.07
5/22/2019		11					
9/3/2019						4.15	6.53
9/4/2019	9.25	10.9	56.3	<1	10.1		
2/11/2020			79.7	<1	8.5		
2/12/2020	10.7	9.13				4.31	5.67
9/8/2020			113	<1			5.42
9/9/2020	7.77	8.76			7.13	3.67	
4/13/2021	7.44	7.88	108	<1	6.37	4.49	4.65
10/4/2021	6.86	8.09	115	<1	6.02	5.05	
10/5/2021							4.08
4/12/2022	8.36	7.36	145	<1	5.75	3.13	4.09

# Time Series

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...
3/23/2016			56.7	237		
3/24/2016	203	239			244	
5/10/2016	204			226	247	
5/11/2016		257	54.7			
7/5/2016	188					194
7/6/2016		256	76	191	247	55.3
8/23/2016						208
9/6/2016	188	245		200	264	
9/7/2016			96			198
11/8/2016	197				173	205
11/9/2016		258	57.3	190		
1/3/2017						221
2/20/2017						55.3
2/21/2017		243	76.7	264		195
2/22/2017	165				260	
5/31/2017	244	252	75.3	242	277	220
7/5/2017	201	257	80	231	296	185
9/5/2017						202
9/7/2017	196	259	105	225	294	
6/12/2018	221	266	72	230	282	205
10/23/2018	195 (D)			201 (D)	279 (D)	204 (D)
10/24/2018		265 (D)	68 (D)			
5/21/2019	244	274	66	231	286	
5/22/2019						202
9/3/2019		260	51.3			35.3
9/4/2019	200			217	271	195
2/12/2020	219	259	66	256	282	189
9/8/2020		275				
9/9/2020	221		59.3	230	271	198
4/13/2021	237	273	66	260	286	191
10/4/2021	221				277	183
10/5/2021		293	92.7	255		
10/6/2021						<25
4/12/2022						27.3
4/13/2022	217	273	84	250	266	187

# Time Series

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	272	334	185	27.3	202		149
3/24/2016						179	
5/10/2016	283	349					
5/11/2016			176	<25	207	195	179
7/5/2016	294						
7/6/2016		316	203	<25	202	192	183
9/6/2016	295		180	<25	204	193	
9/7/2016		309					173
11/8/2016	310	302	187	<25	212	198	207
2/20/2017		297	205	30	251	195	
2/21/2017	280						153
5/30/2017			187	<25		184	158
5/31/2017	287	287			234		
7/5/2017	287	283	238	26	229	194	138
9/5/2017	280	284					
9/7/2017			269	<25	225	193	171
6/11/2018			312	<25	210		
6/12/2018	284	248				186	167
10/22/2018	278 (D)		292 (D)	<25 (D)	209 (D)	184 (D)	177 (D)
10/23/2018		215 (D)					
5/20/2019	286		398	27.3	218		
5/21/2019						185	176
5/22/2019		184					
9/3/2019						184	189
9/4/2019	297	225	388	<25	233		
2/11/2020			308	<25	241		
2/12/2020	276	250				182	153
9/8/2020			360	<25			187
9/9/2020	272	220			234	192	
4/13/2021	283	196	350	26	220	186	163
10/4/2021	287	168	379	32	232	203	
10/5/2021							170
4/12/2022	271	156	400	<25	214	176	155

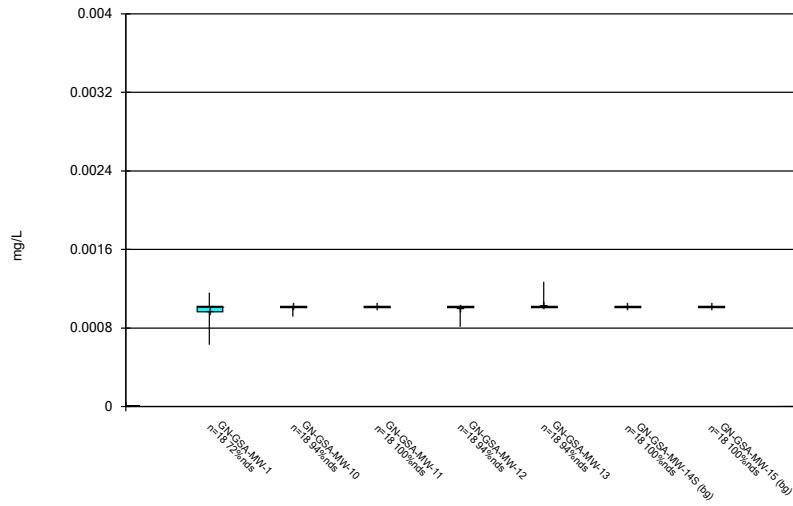






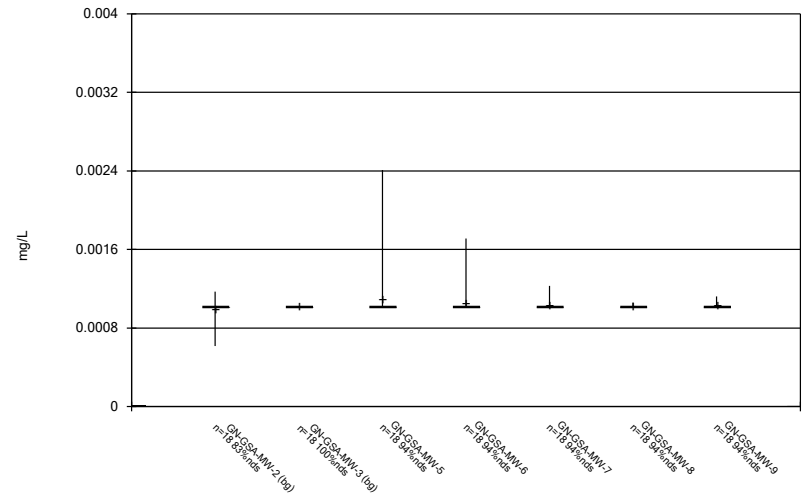
FIGURE B.

### Box & Whiskers Plot



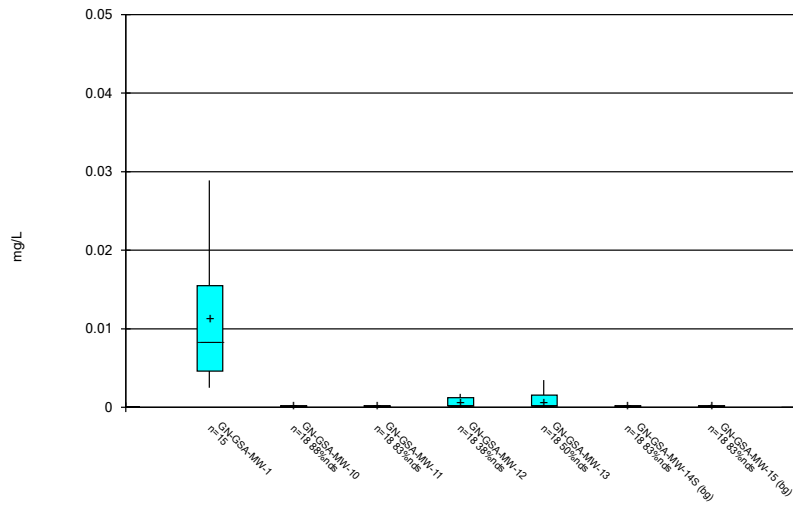
Constituent: Antimony Analysis Run 5/31/2022 10:24 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



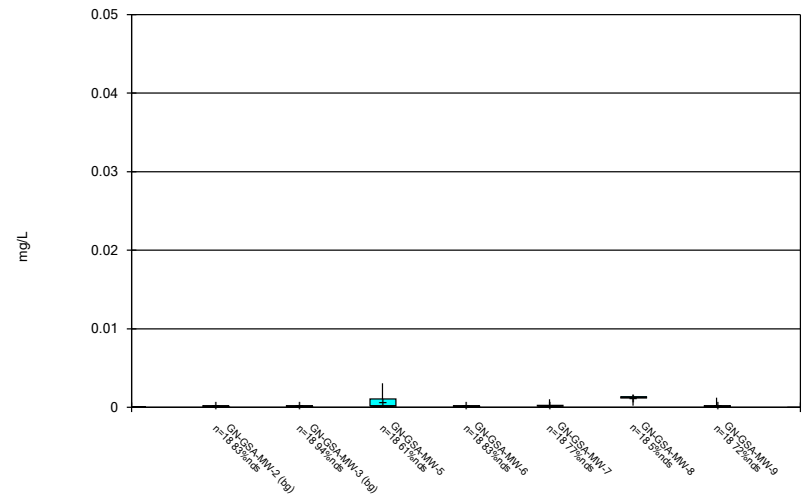
Constituent: Antimony Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



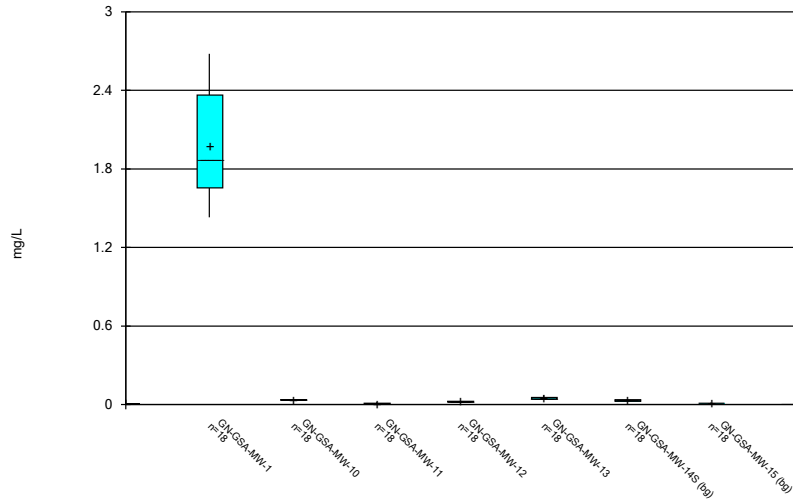
Constituent: Arsenic Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



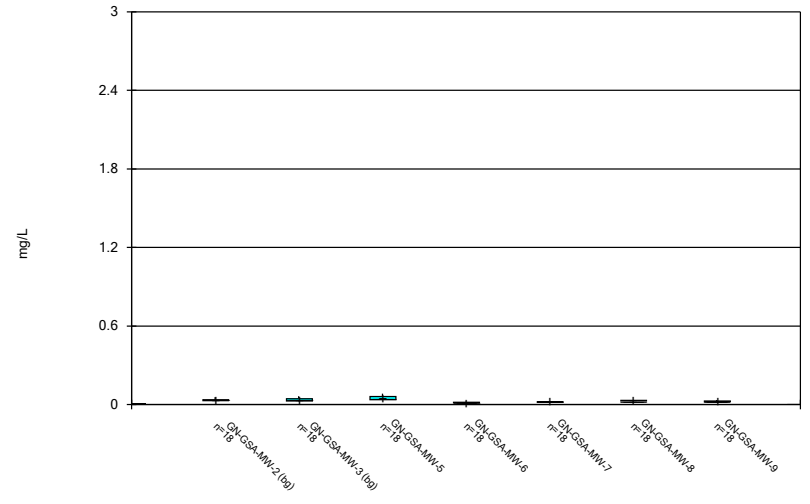
Constituent: Arsenic Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



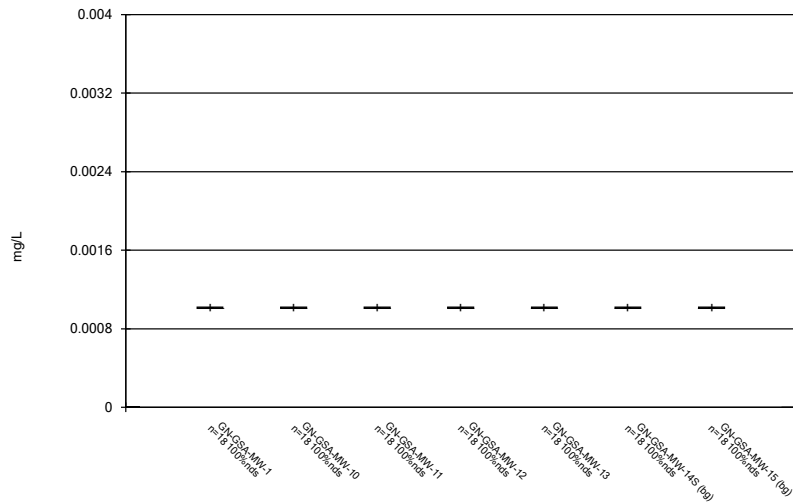
Constituent: Barium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



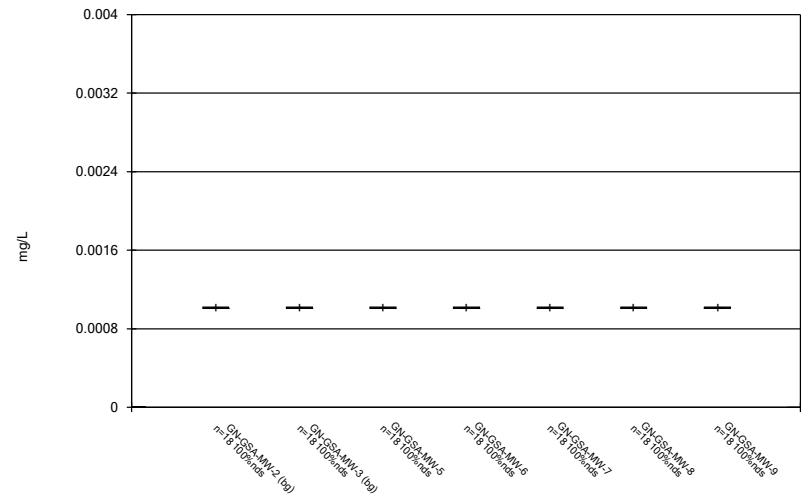
Constituent: Barium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



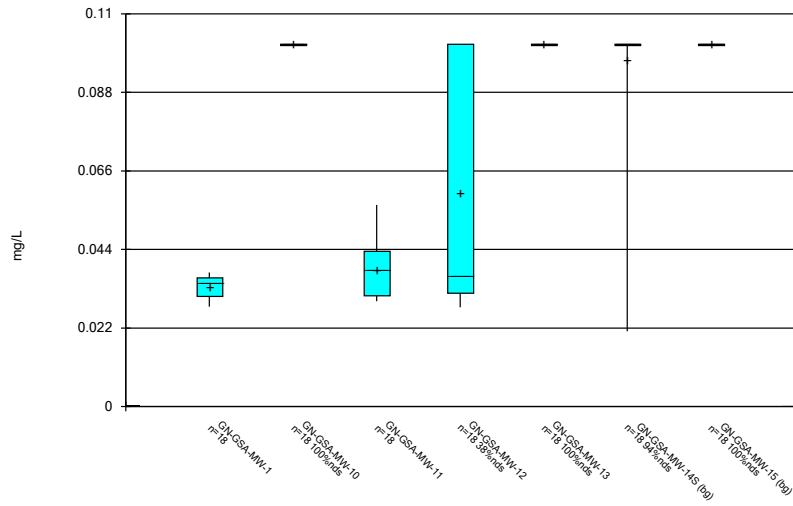
Constituent: Beryllium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



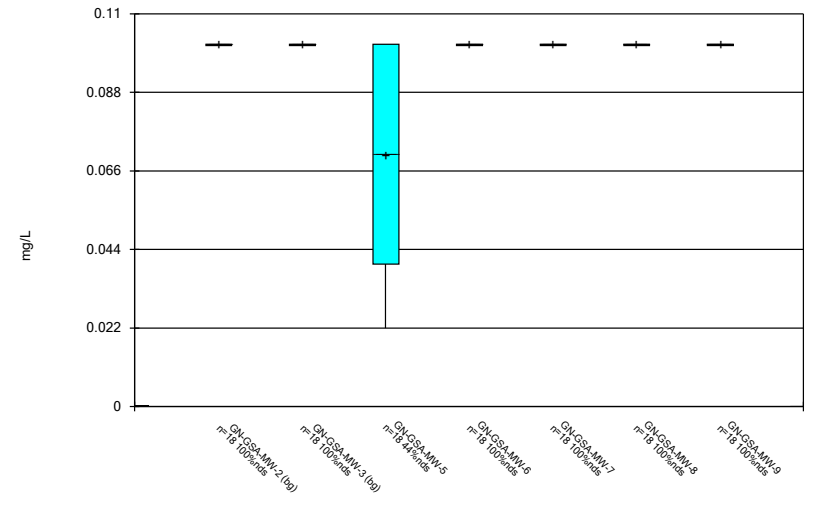
Constituent: Beryllium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



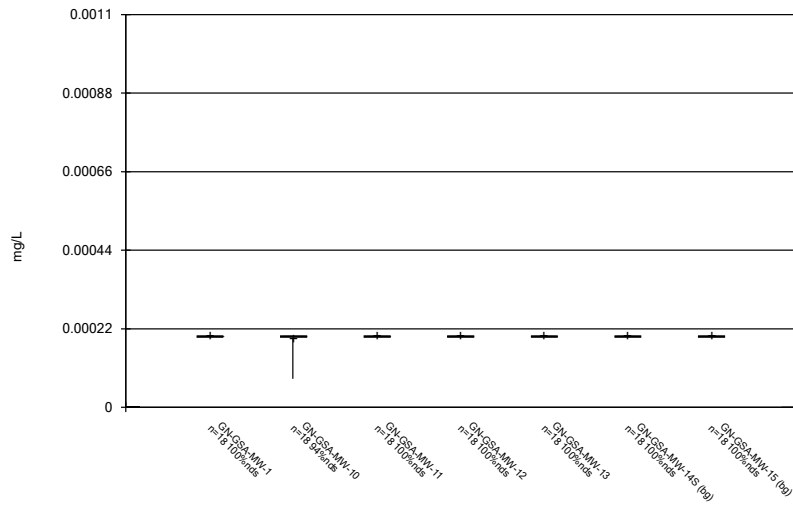
Constituent: Boron Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



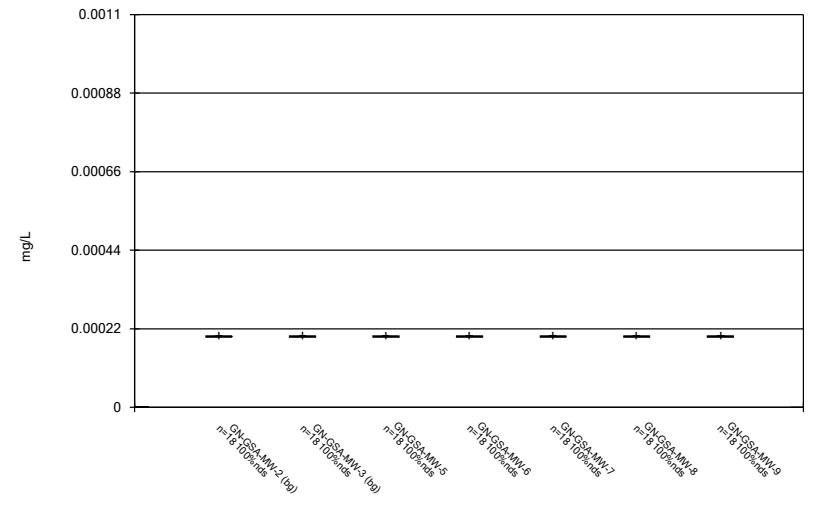
Constituent: Boron Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



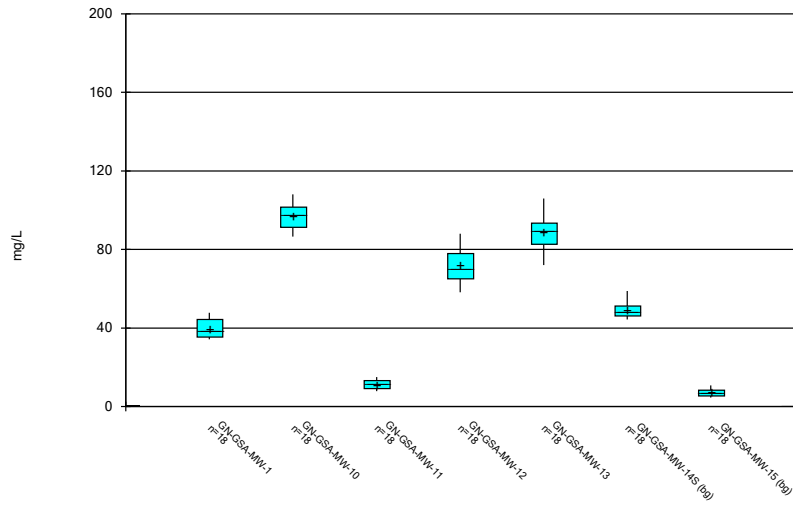
Constituent: Cadmium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



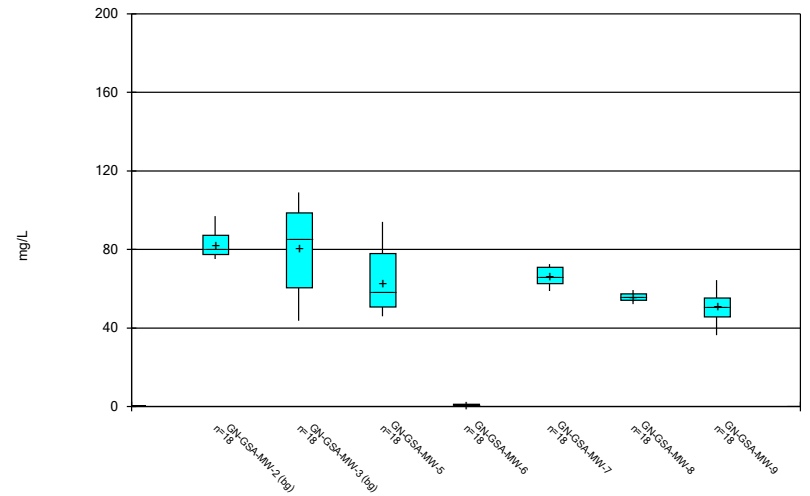
Constituent: Cadmium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



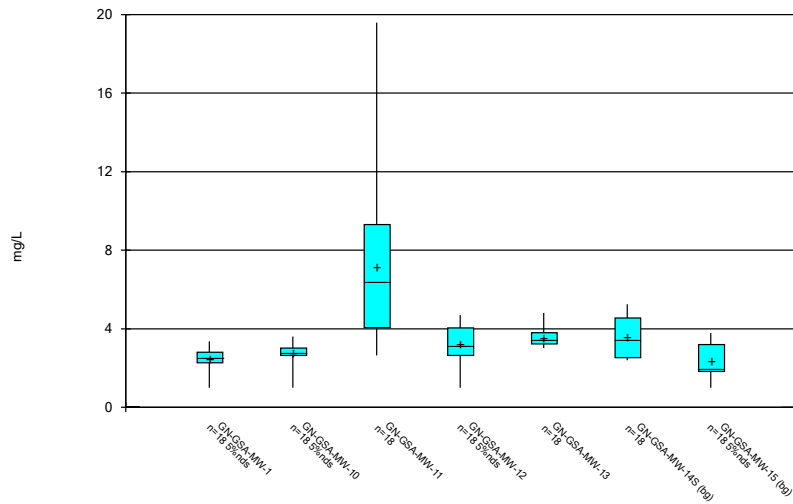
Constituent: Calcium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



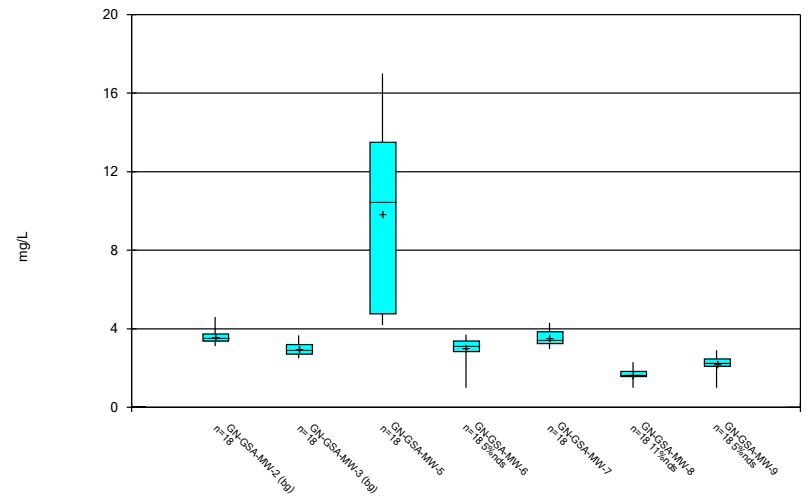
Constituent: Calcium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



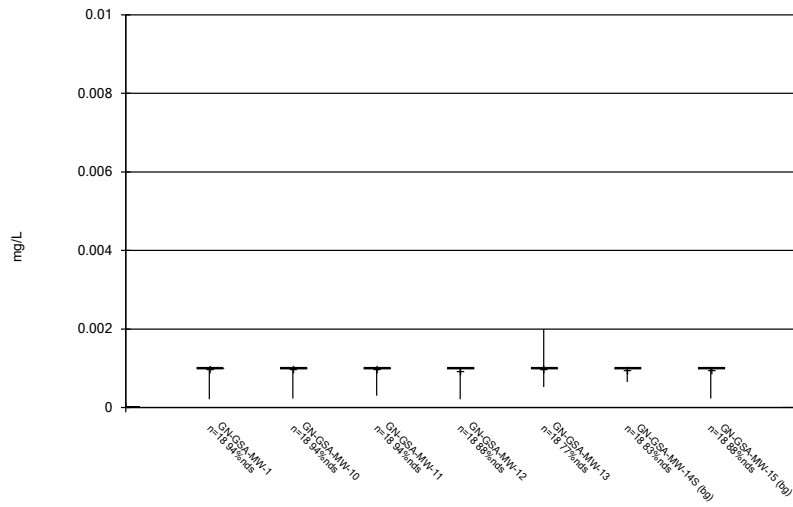
Constituent: Chloride Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



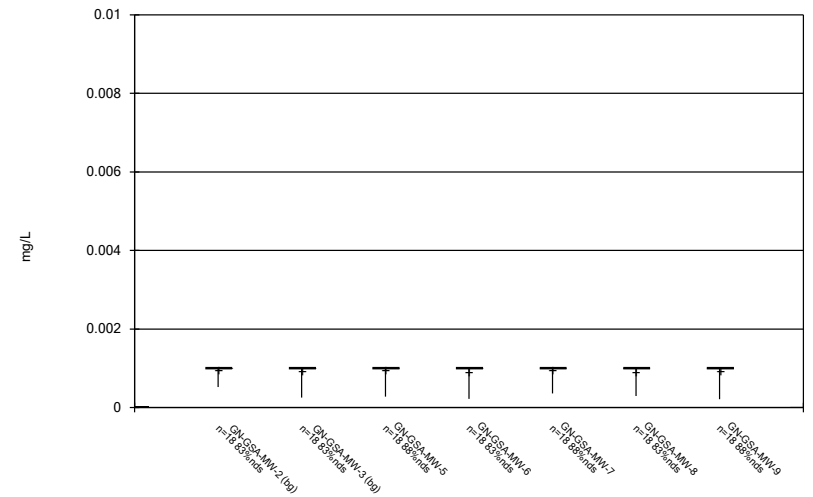
Constituent: Chloride Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



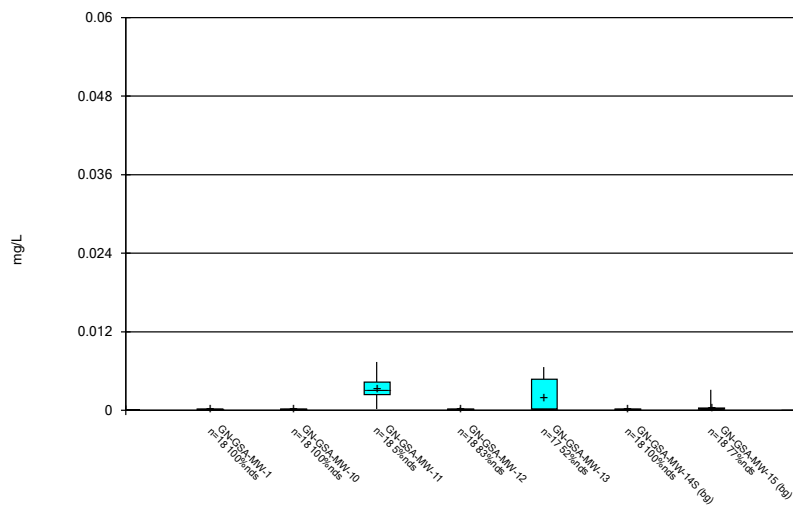
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



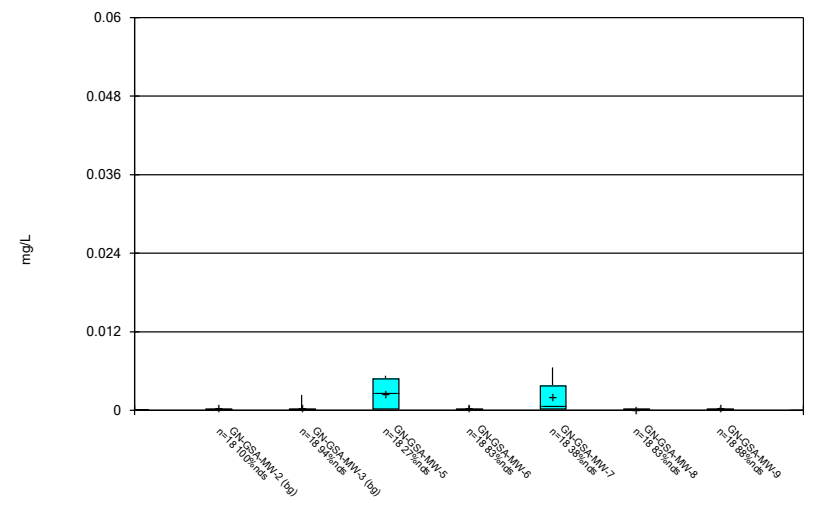
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

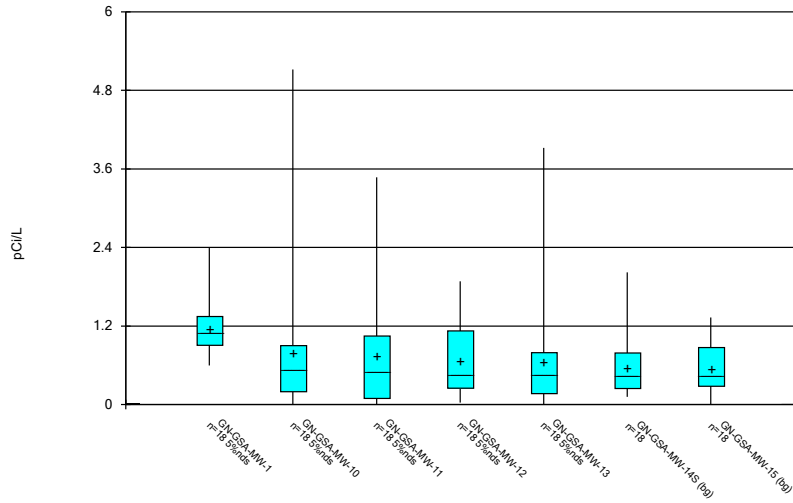
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

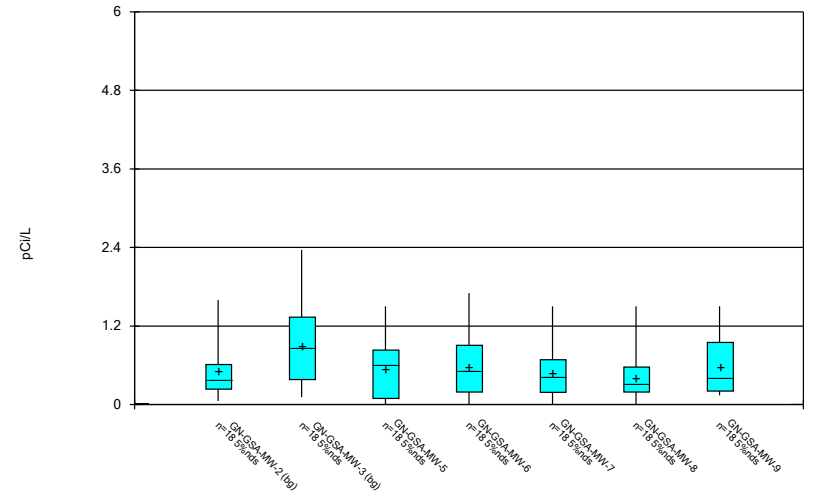


### Box & Whiskers Plot



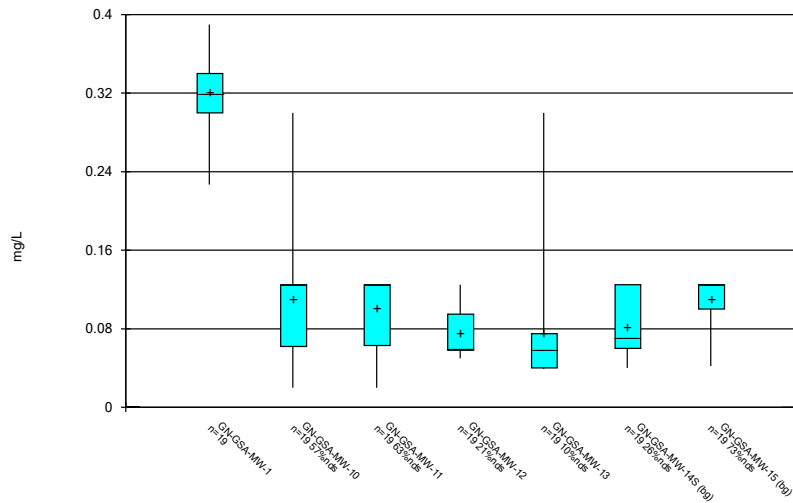
Constituent: Combined Radium 226 + 228 Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



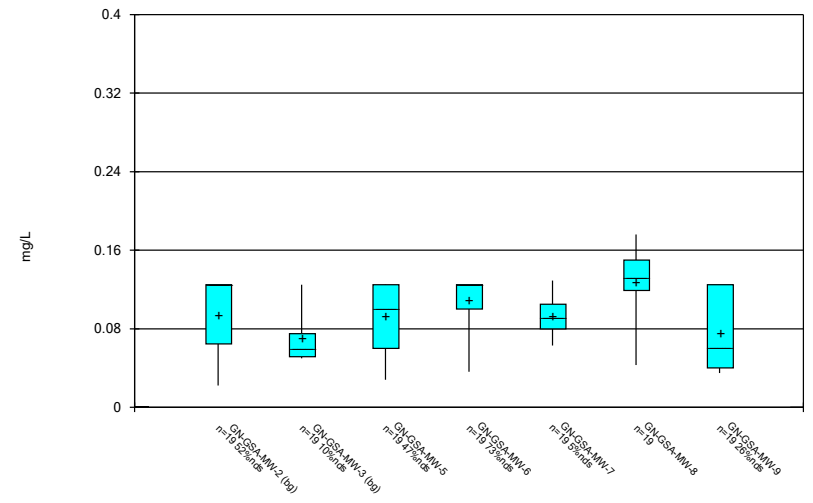
Constituent: Combined Radium 226 + 228 Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



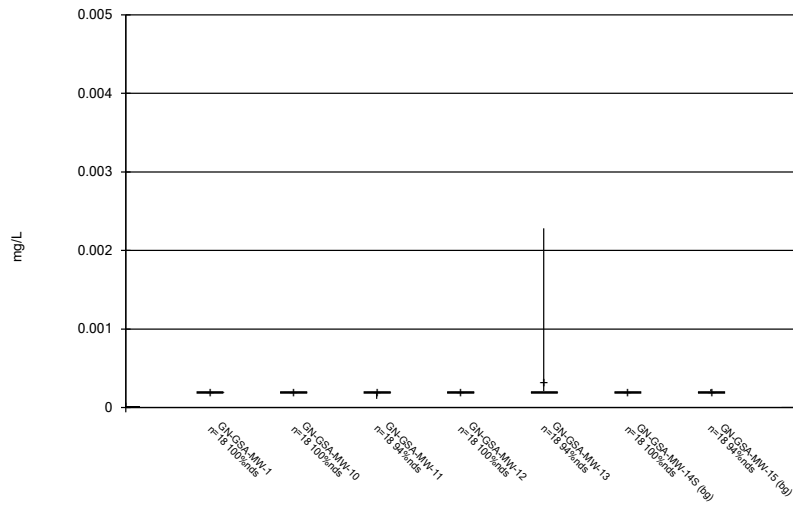
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



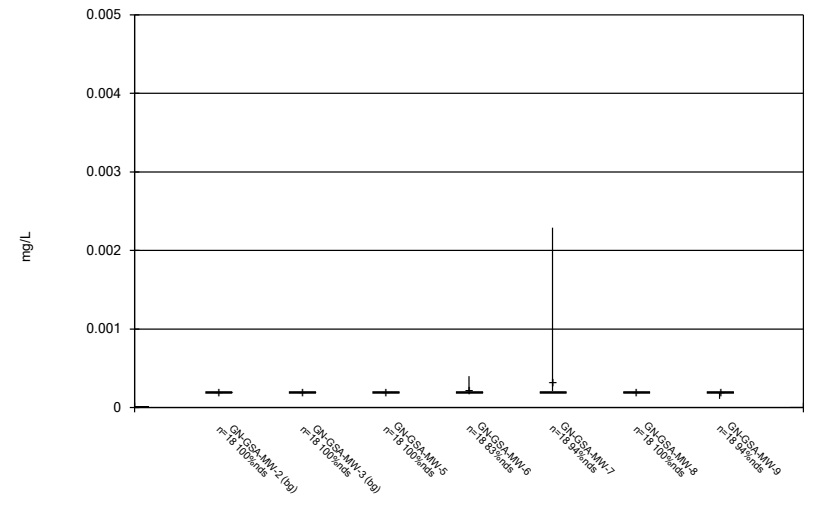
Constituent: Fluoride Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



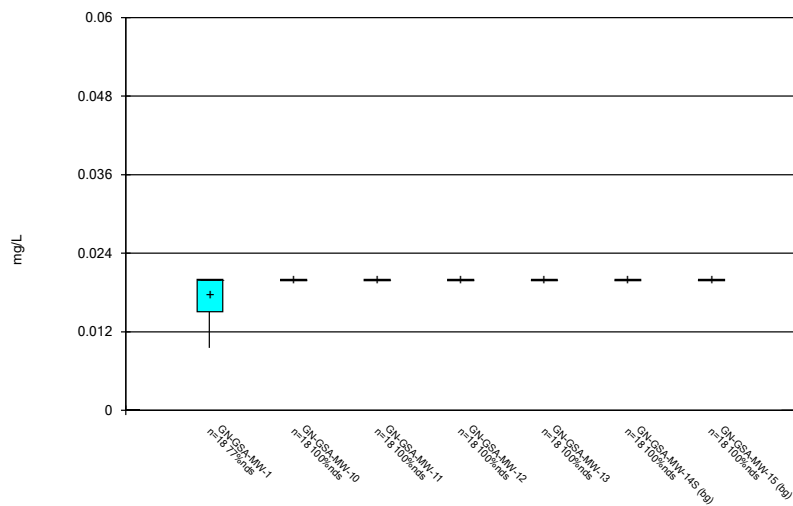
Constituent: Lead Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



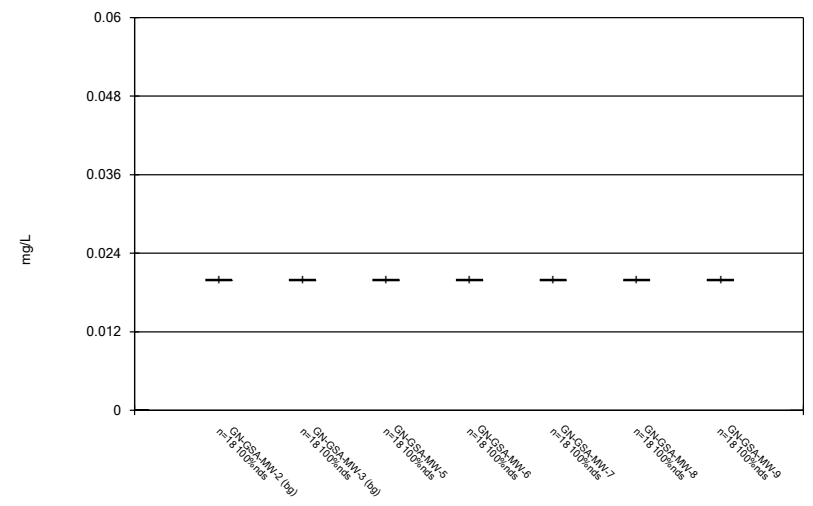
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



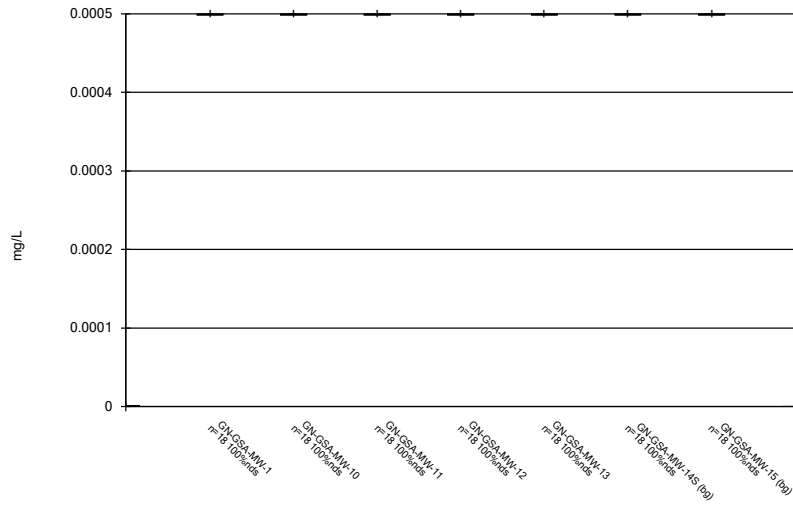
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



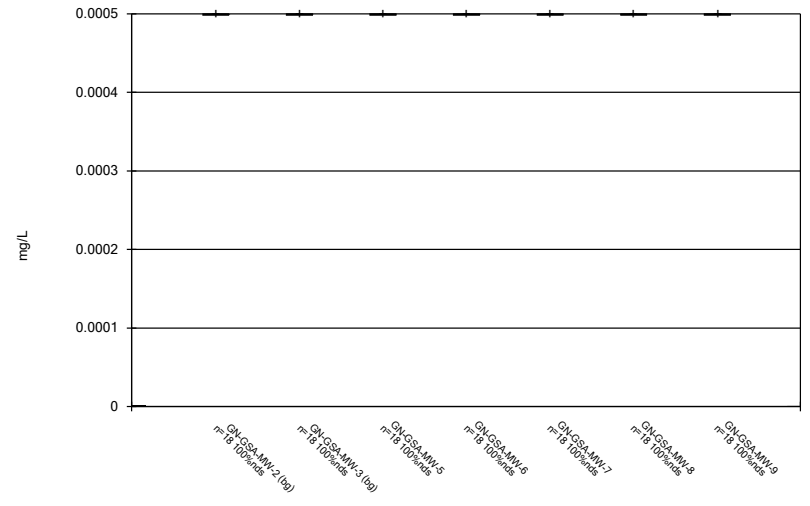
Constituent: Lithium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



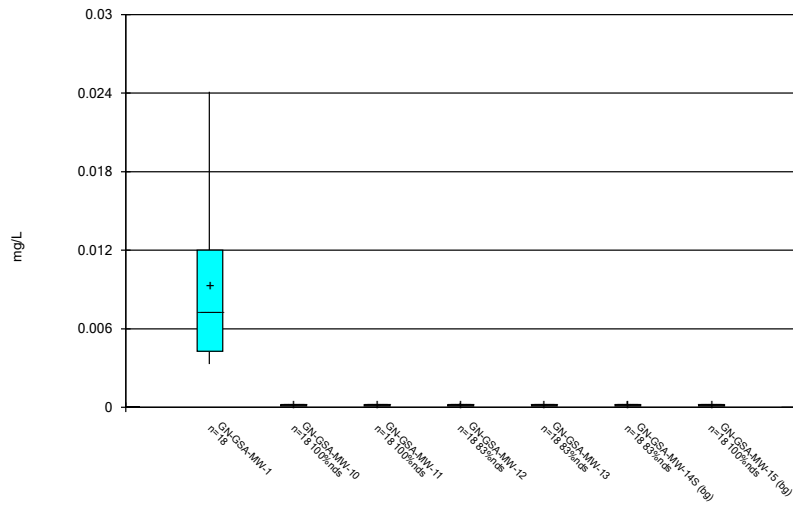
Constituent: Mercury Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



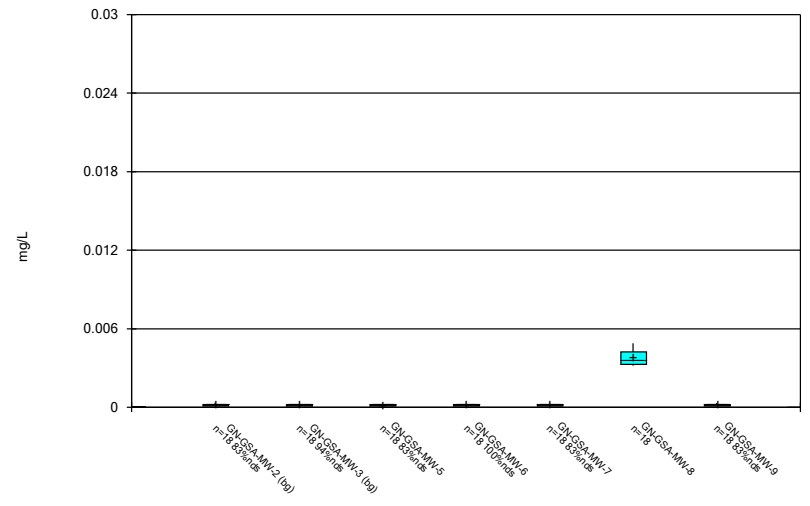
Constituent: Mercury Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



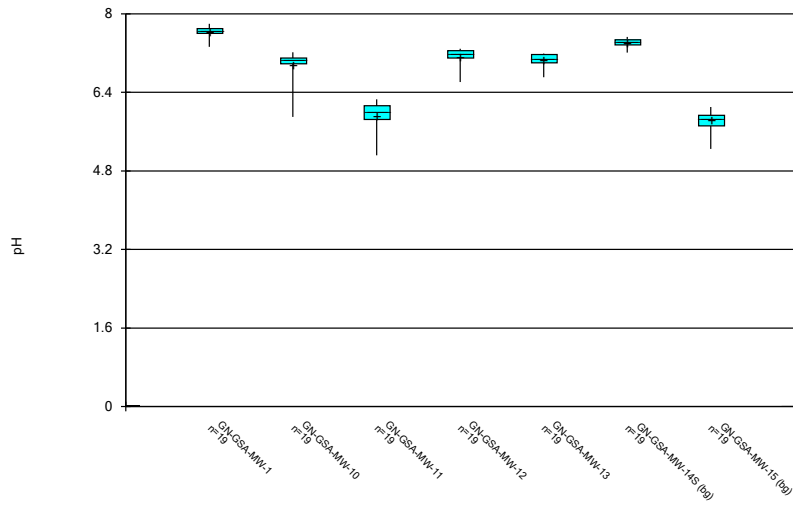
Constituent: Molybdenum Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



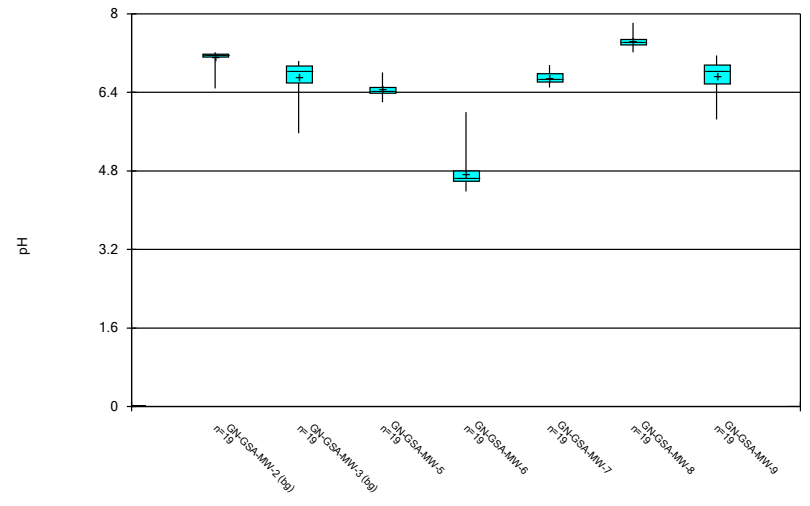
Constituent: Molybdenum Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



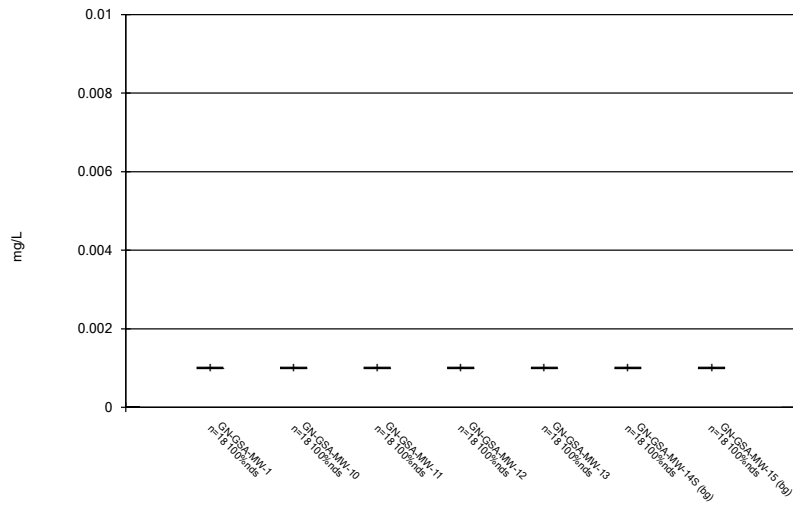
Constituent: pH Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



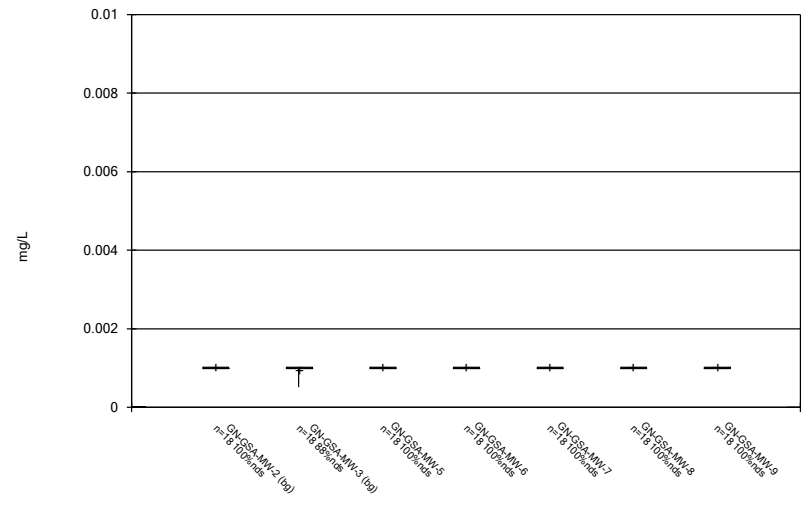
Constituent: pH Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



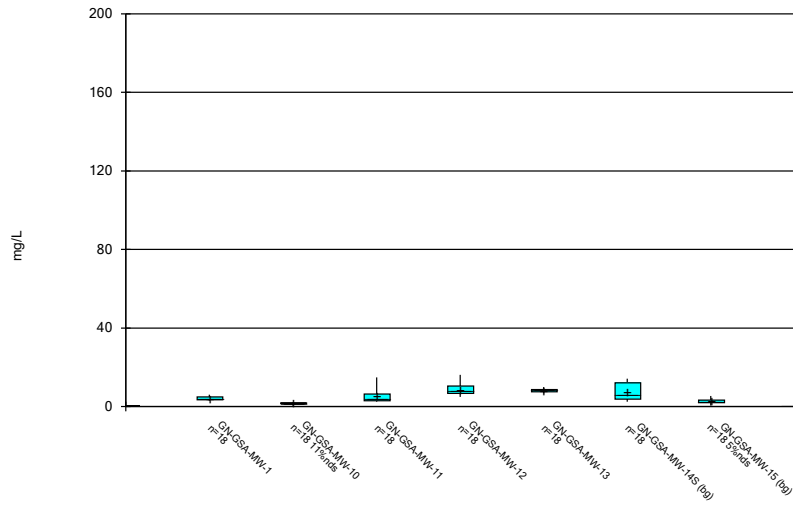
Constituent: Selenium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



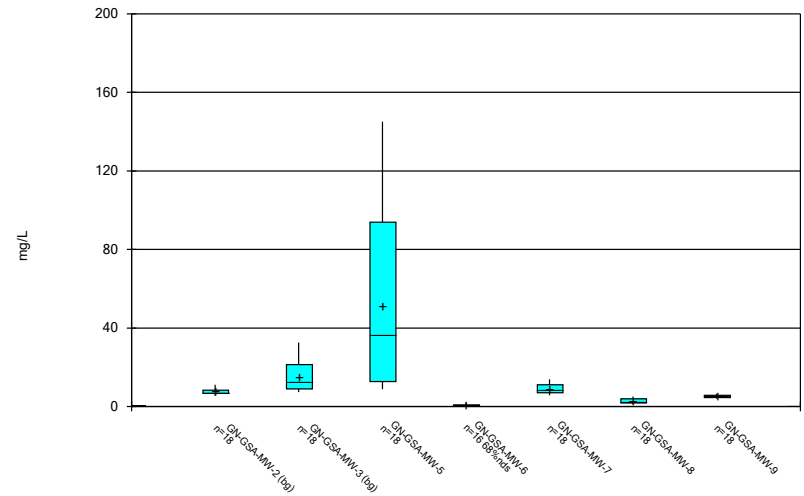
Constituent: Selenium Analysis Run 5/31/2022 10:25 AM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



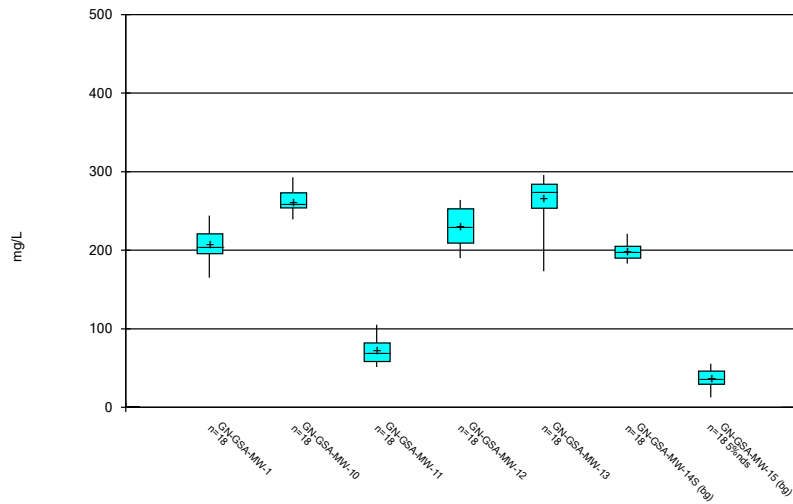
Constituent: Sulfate Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



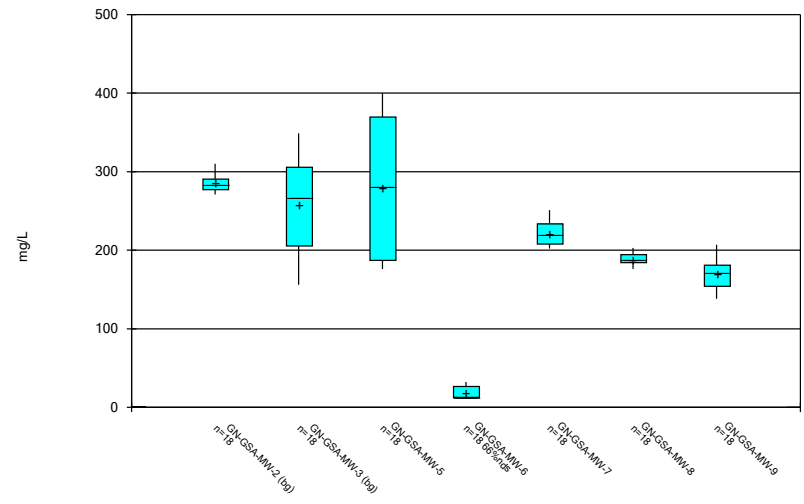
Constituent: Sulfate Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



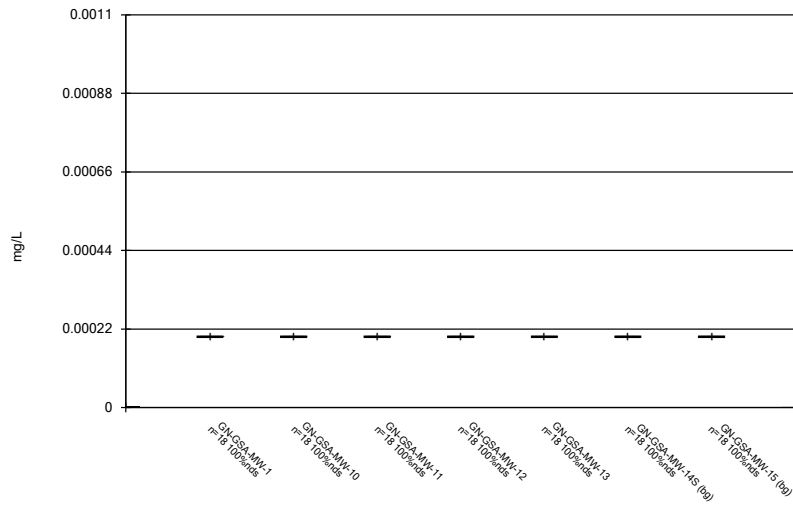
Constituent: TDS Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



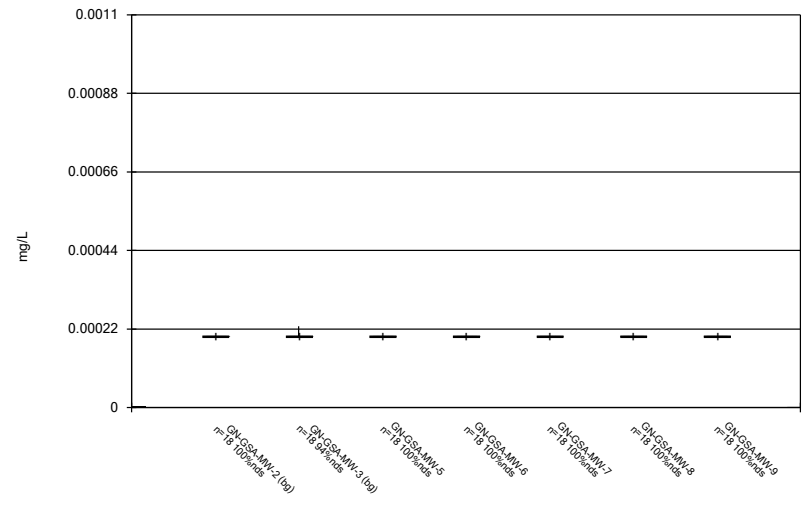
Constituent: TDS Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/31/2022 10:25 AM  
Plant Gaston Client: Southern Company Data: Gaston GSA

FIGURE C.

# Outlier Summary

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 9:57 AM

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	GN-GSA-MW-1 Arsenic (mg/L)	GN-GSA-MW-13 Cobalt (mg/L)	GN-GSA-MW-6 Sulfate (mg/L)
3/24/2016	0.0444 (o)		
5/10/2016	0.041 (o)		
7/5/2016	0.0333 (o)		
2/20/2017		5 (o)	
5/30/2017		5 (o)	
5/21/2019	0.0578 (o)		



FIGURE D.

# Intrawell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-12	85.67	n/a	4/13/2022	88	Yes	16	69.87	6.624	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-14S	57.44	n/a	4/13/2022	58.9	Yes	16	48.82	3.611	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-5	71.16	n/a	4/12/2022	94.1	Yes	12	54.73	6.323	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-11	7.709	n/a	4/13/2022	19.6	Yes	9	4.269	1.162	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-5	37.06	n/a	4/12/2022	145	Yes	9	15.51	7.278	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-8	2.935	n/a	4/12/2022	3.13	Yes	9	1.843	0.3686	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-5	295.1	n/a	4/12/2022	400	Yes	9	203.3	30.98	0	None	No	0.0007523	Param Intra 1 of 2

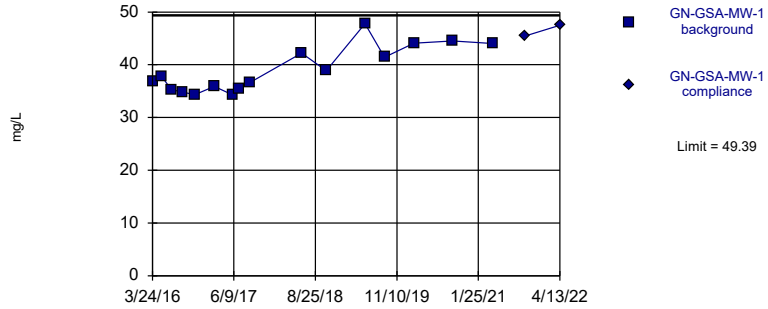
# Intrawell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-1	49.39	n/a	4/13/2022	47.5	No	16	39.03	4.343	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-10	108.2	n/a	4/13/2022	107	No	16	95.87	5.157	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-11	15.67	n/a	4/13/2022	15	No	16	10.74	2.063	0	None	No	0.0007523	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>85.67</b>	<b>n/a</b>	<b>4/13/2022</b>	<b>88</b>	<b>Yes</b>	<b>16</b>	<b>69.87</b>	<b>6.624</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	GN-GSA-MW-13	109.8	n/a	4/13/2022	91.8	No	16	88.63	8.857	0	None	No	0.0007523	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-14S</b>	<b>57.44</b>	<b>n/a</b>	<b>4/13/2022</b>	<b>58.9</b>	<b>Yes</b>	<b>16</b>	<b>48.82</b>	<b>3.611</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	GN-GSA-MW-15	11.1	n/a	4/12/2022	4.59	No	16	7.273	1.606	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-2	96.06	n/a	4/12/2022	87.1	No	16	81.49	6.104	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-3	125.5	n/a	4/12/2022	55.1	No	16	84.59	17.13	0	None	No	0.0007523	Param Intra 1 of 2
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>71.16</b>	<b>n/a</b>	<b>4/12/2022</b>	<b>94.1</b>	<b>Yes</b>	<b>12</b>	<b>54.73</b>	<b>6.323</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Calcium (mg/L)	GN-GSA-MW-6	1.491	n/a	4/12/2022	0.516	No	16	0.867	0.2613	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-7	76.85	n/a	4/12/2022	71.2	No	16	65.81	4.63	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-8	61.1	n/a	4/12/2022	54.4	No	16	55.91	2.177	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-9	67.34	n/a	4/12/2022	50.4	No	16	50.56	7.034	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-1	3.72	n/a	4/13/2022	2.17	No	16	2.492	0.5148	6.25	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-10	3.733	n/a	4/13/2022	2.77	No	16	7.867	2.545	6.25	None	x^2	0.0007523	Param Intra 1 of 2
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>7.709</b>	<b>n/a</b>	<b>4/13/2022</b>	<b>19.6</b>	<b>Yes</b>	<b>9</b>	<b>4.269</b>	<b>1.162</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Chloride (mg/L)	GN-GSA-MW-12	5.443	n/a	4/13/2022	3.76	No	16	3.16	0.9566	6.25	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-13	4.799	n/a	4/13/2022	3.01	No	16	3.594	0.5051	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-14S	5.899	n/a	4/13/2022	2.42	No	16	3.731	0.9087	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-15	4.314	n/a	4/12/2022	1.88	No	16	2.366	0.8163	6.25	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-2	4.633	n/a	4/12/2022	3.23	No	16	3.649	0.4125	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-3	3.779	n/a	4/12/2022	2.67	No	16	2.981	0.3341	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-5	21.16	n/a	4/12/2022	7.35	No	16	10.05	4.656	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-6	4.019	n/a	4/12/2022	3.38	No	16	9.249	2.894	6.25	None	x^2	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-7	4.585	n/a	4/12/2022	3.29	No	16	3.546	0.4352	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-8	2.505	n/a	4/12/2022	1.54	No	16	1.679	0.3463	12.5	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-9	3.098	n/a	4/12/2022	1.91	No	16	5.326	1.791	6.25	None	x^2	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-1	6.359	n/a	4/13/2022	4.24	No	16	4.188	0.9103	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-10	2.255	n/a	4/13/2022	1.68J	No	16	4.979	2.722	12.5	None	x^3	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-11	14.58	n/a	4/13/2022	2.73	No	16	2.28	0.6446	0	None	sqrt(x)	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-12	16.13	n/a	4/13/2022	8.25	No	16	8.719	3.106	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-13	10.31	n/a	4/13/2022	7.27	No	16	8.234	0.871	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-14S	16.97	n/a	4/13/2022	2.44	No	16	7.728	3.872	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-15	5.392	n/a	4/12/2022	1.76J	No	16	2.705	1.126	6.25	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-2	11.38	n/a	4/12/2022	8.36	No	16	7.632	1.57	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-3	19.53	n/a	4/12/2022	7.36	No	11	11.88	2.842	0	None	No	0.0007523	Param Intra 1 of 2
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>37.06</b>	<b>n/a</b>	<b>4/12/2022</b>	<b>145</b>	<b>Yes</b>	<b>9</b>	<b>15.51</b>	<b>7.278</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Sulfate (mg/L)	GN-GSA-MW-6	1.89	n/a	4/12/2022	0.5ND	No	14	n/a	n/a	64.29	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Sulfate (mg/L)	GN-GSA-MW-7	14.59	n/a	4/12/2022	5.75	No	16	9.522	2.123	0	None	No	0.0007523	Param Intra 1 of 2
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>2.935</b>	<b>n/a</b>	<b>4/12/2022</b>	<b>3.13</b>	<b>Yes</b>	<b>9</b>	<b>1.843</b>	<b>0.3686</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
Sulfate (mg/L)	GN-GSA-MW-9	6.776	n/a	4/12/2022	4.09	No	16	5.406	0.5742	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-1	259.7	n/a	4/13/2022	217	No	16	207.7	21.8	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-10	274	n/a	4/13/2022	273	No	9	251.8	7.496	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-11	105.2	n/a	4/13/2022	84	No	16	70.39	14.61	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-12	281.5	n/a	4/13/2022	250	No	16	226.9	22.87	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-13	317.1	n/a	4/13/2022	266	No	16	1.9e7	5203459	0	None	x^3	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-14S	224.5	n/a	4/13/2022	187	No	16	200.8	9.97	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-15	60.07	n/a	4/12/2022	27.3	No	16	39.45	8.643	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-2	309	n/a	4/12/2022	271	No	16	285.3	9.95	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-3	388.2	n/a	4/12/2022	156	No	16	268.7	50.11	0	None	No	0.0007523	Param Intra 1 of 2
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>295.1</b>	<b>n/a</b>	<b>4/12/2022</b>	<b>400</b>	<b>Yes</b>	<b>9</b>	<b>203.3</b>	<b>30.98</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>
TDS (mg/L)	GN-GSA-MW-6	30	n/a	4/12/2022	12.5ND	No	16	n/a	n/a	68.75	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
TDS (mg/L)	GN-GSA-MW-7	256.7	n/a	4/12/2022	214	No	16	220.7	15.11	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-8	202.5	n/a	4/12/2022	176	No	16	188.9	5.691	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-9	212	n/a	4/12/2022	155	No	16	170.2	17.53	0	None	No	0.0007523	Param Intra 1 of 2

Within Limit

Prediction Limit  
Intrawell Parametric

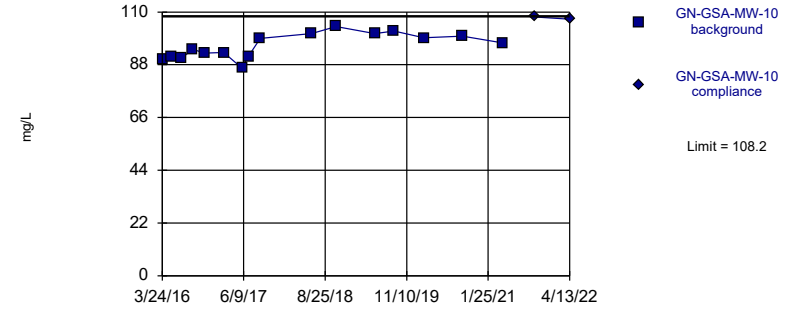


Background Data Summary: Mean=39.03, Std. Dev.=4.343, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8917, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

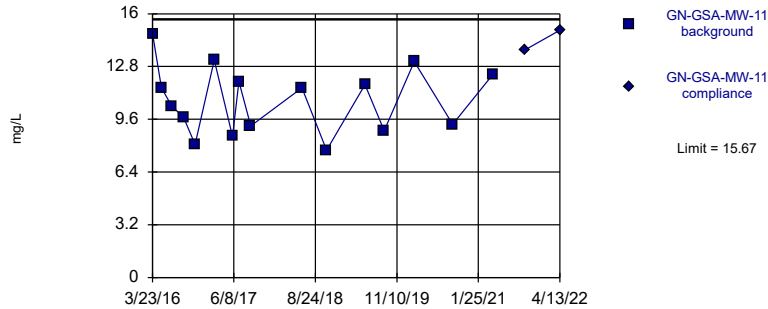


Background Data Summary: Mean=95.87, Std. Dev.=5.157, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9448, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

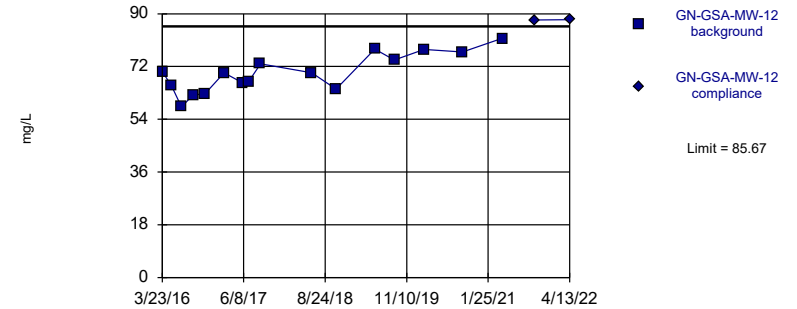


Background Data Summary: Mean=10.74, Std. Dev.=2.063, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9586, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

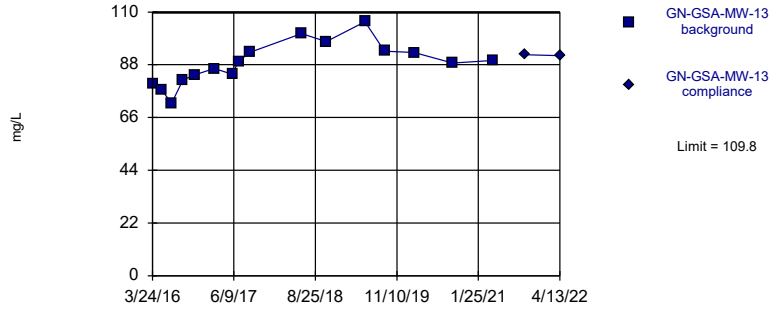


Background Data Summary: Mean=69.87, Std. Dev.=6.624, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9738, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

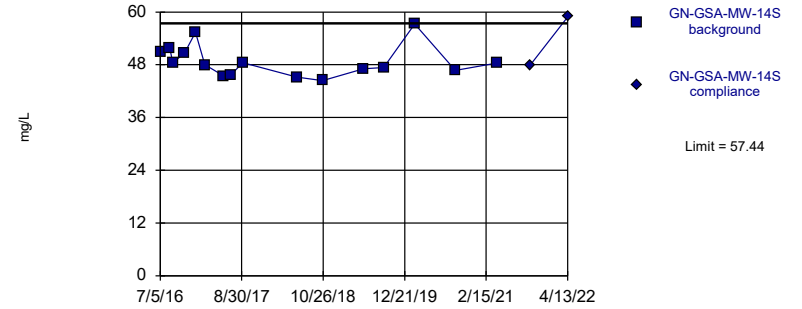


Background Data Summary: Mean=88.63, Std. Dev.=8.857, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9929, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

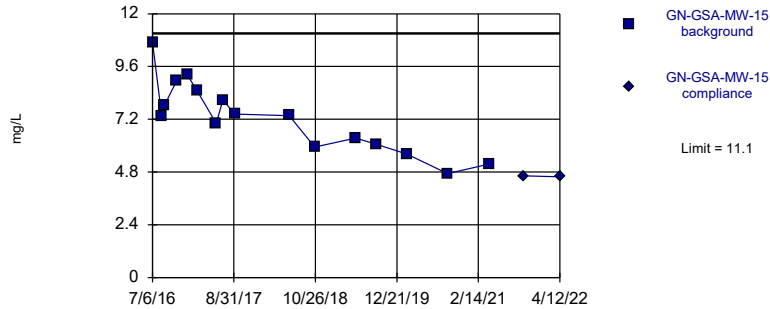


Background Data Summary: Mean=48.82, Std. Dev.=3.611, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8963, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

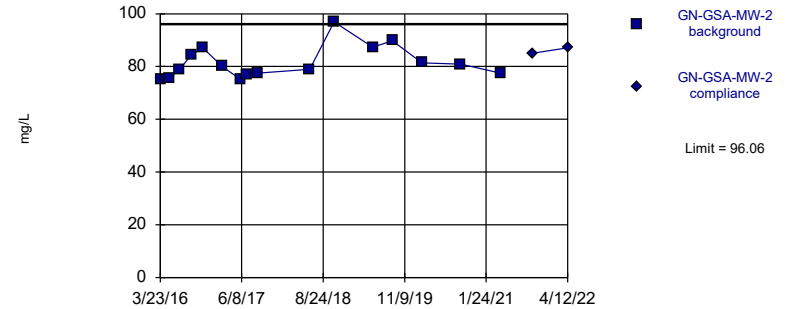


Background Data Summary: Mean=7.273, Std. Dev.=1.606, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9799, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

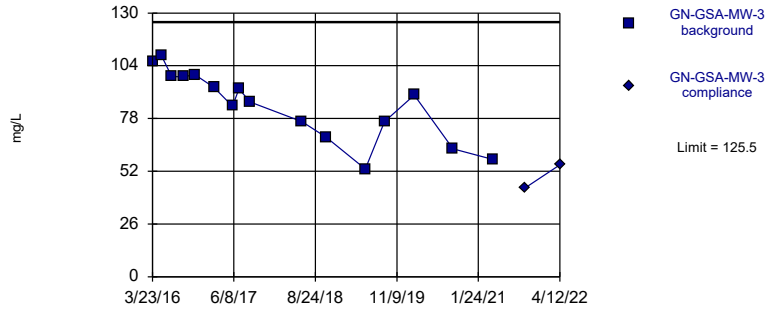


Background Data Summary: Mean=81.49, Std. Dev.=6.104, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.876, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

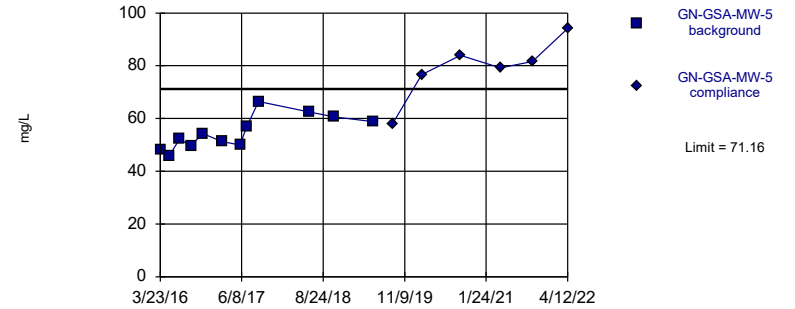


Background Data Summary: Mean=84.59, Std. Dev.=17.13, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9492, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

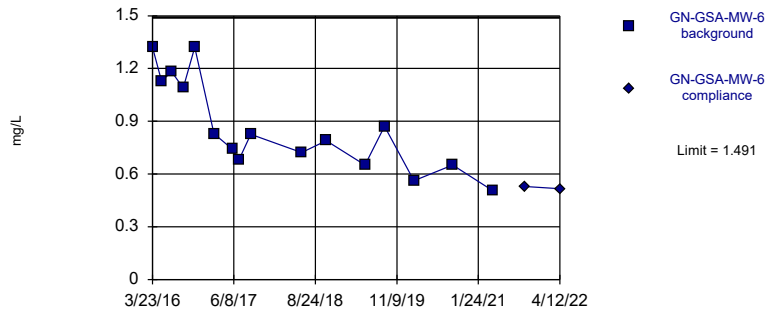


Background Data Summary: Mean=54.73, Std. Dev.=6.323, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

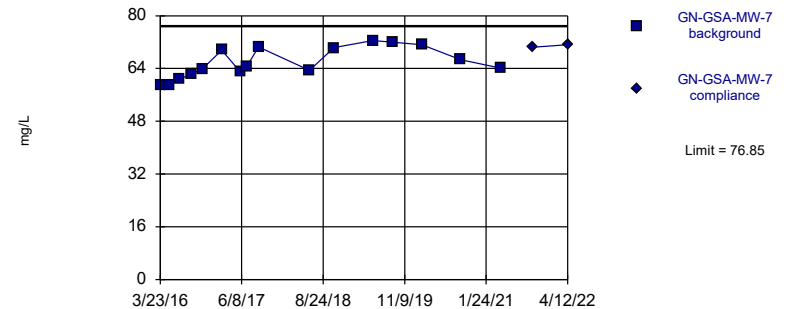


Background Data Summary: Mean=0.867, Std. Dev.=0.2613, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9137, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

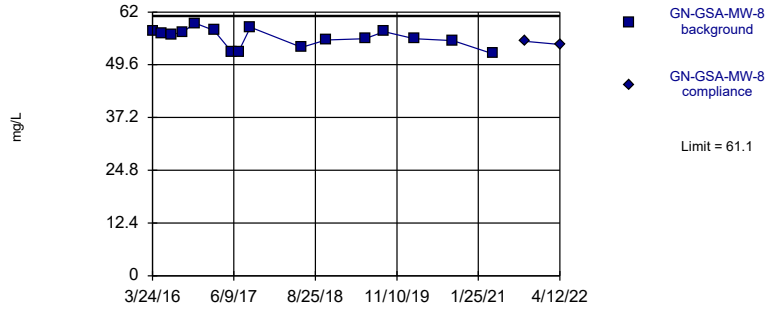


Background Data Summary: Mean=65.81, Std. Dev.=4.63, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9195, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

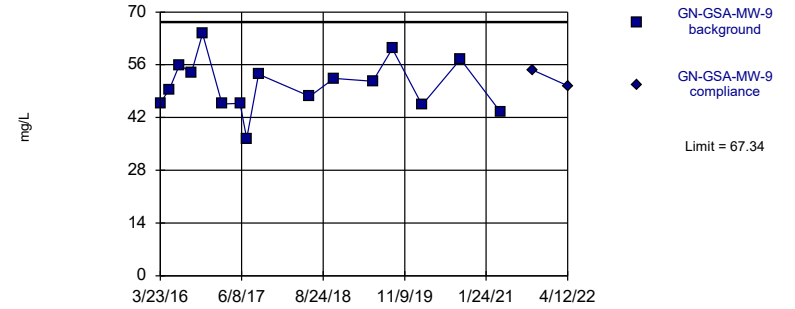


Background Data Summary: Mean=55.91, Std. Dev.=2.177, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9348, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

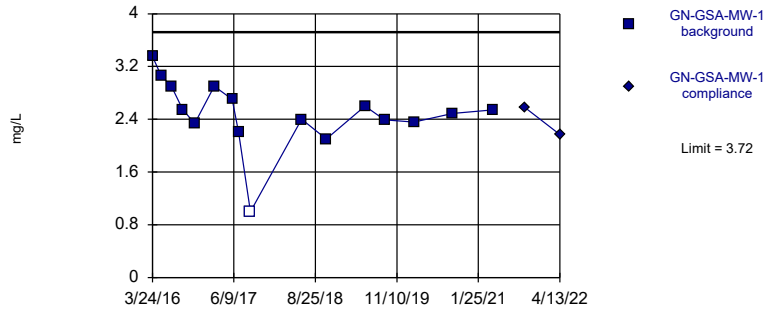


Background Data Summary: Mean=50.56, Std. Dev.=7.034, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9805, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

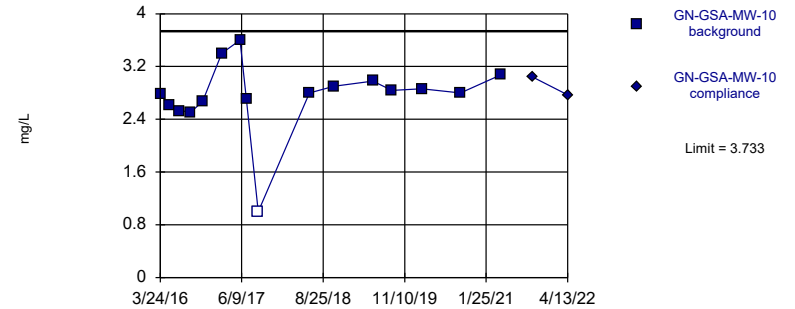


Background Data Summary: Mean=2.492, Std. Dev.=0.5148, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8783, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

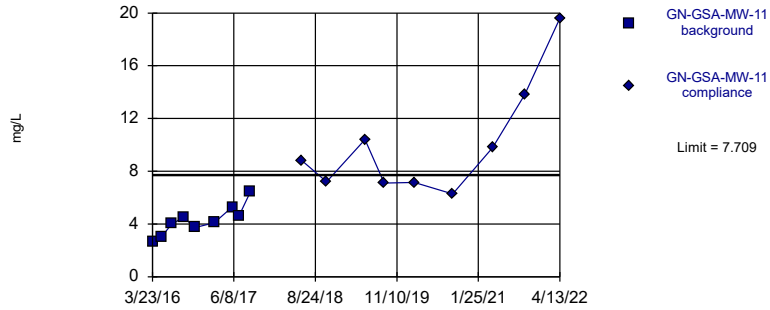


Background Data Summary (based on square transformation): Mean=7.867, Std. Dev.=2.545, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8763, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

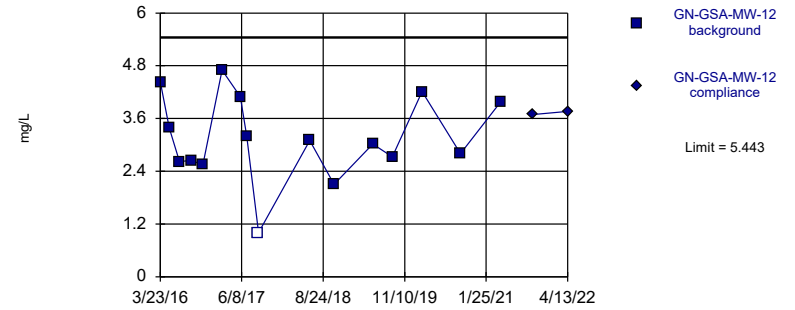


Background Data Summary: Mean=4.269, Std. Dev.=1.162, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9661, critical = 0.764. Kappa = 2.961 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

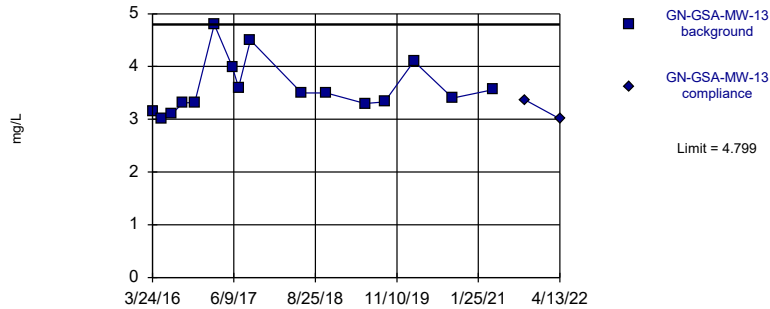


Background Data Summary: Mean=3.16, Std. Dev.=0.9566, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9569, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

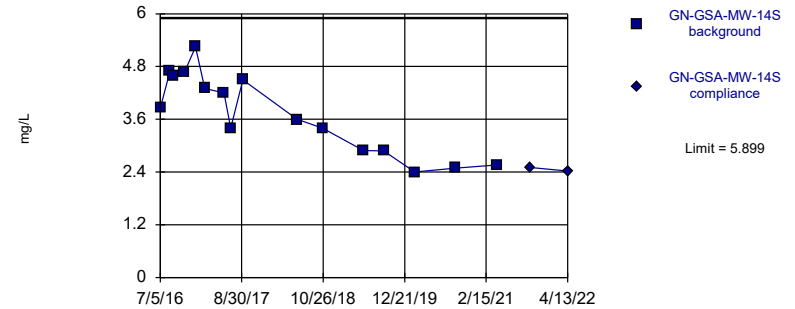


Background Data Summary: Mean=3.594, Std. Dev.=0.5051, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8575, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric



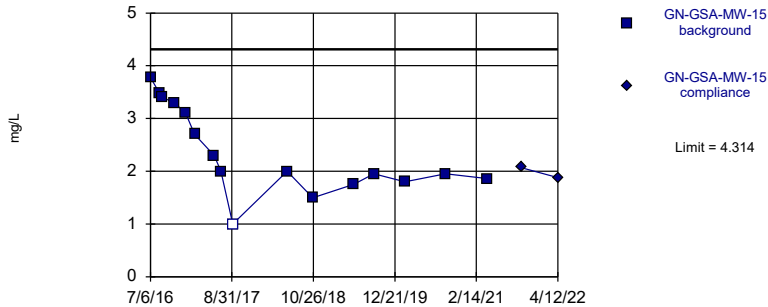
Background Data Summary: Mean=3.731, Std. Dev.=0.9087, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9381, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA



Within Limit

Prediction Limit  
Intrawell Parametric

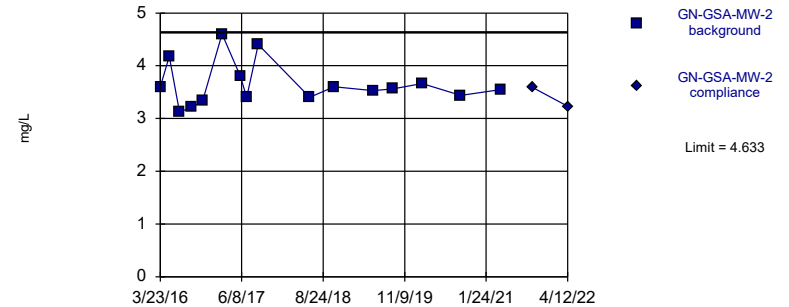


Background Data Summary: Mean=2.366, Std. Dev.=0.8163, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9218, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

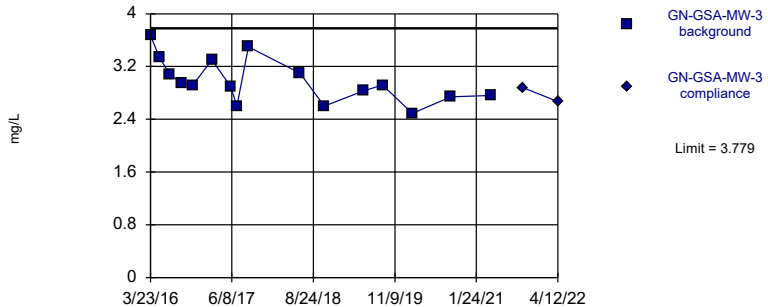


Background Data Summary: Mean=3.649, Std. Dev.=0.4125, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8696, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

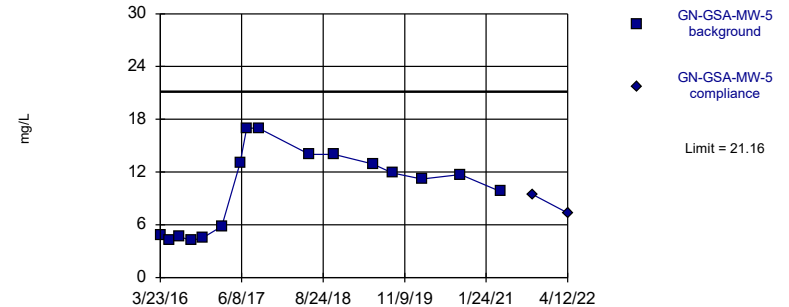


Background Data Summary: Mean=2.981, Std. Dev.=0.3341, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9557, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

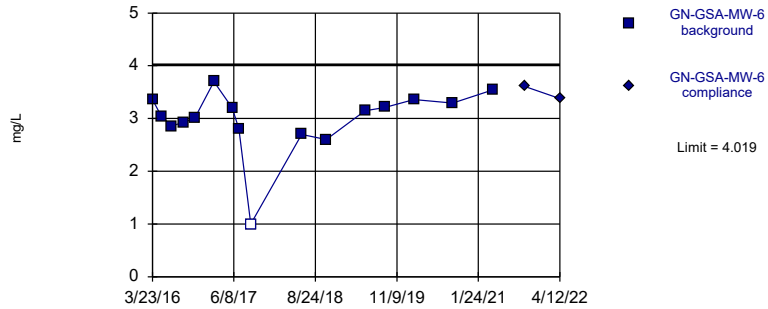


Background Data Summary: Mean=10.05, Std. Dev.=4.656, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8792, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

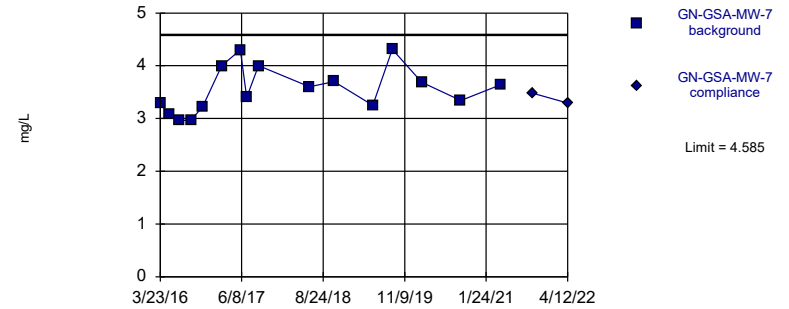


Background Data Summary (based on square transformation): Mean=9.249, Std. Dev.=2.894, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9006, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

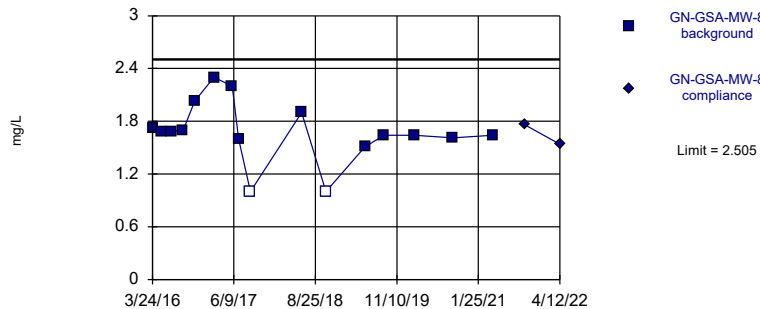


Background Data Summary: Mean=3.546, Std. Dev.=0.4352, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9366, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

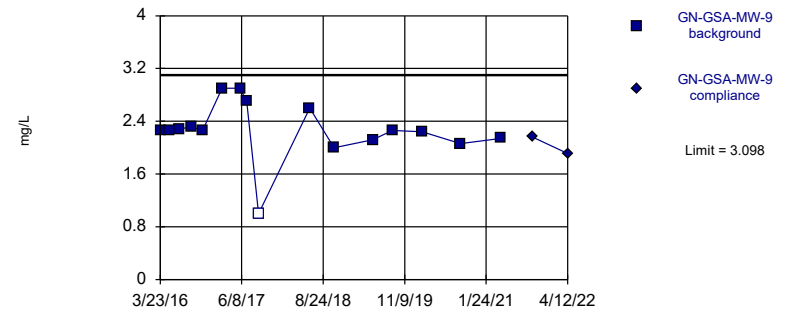


Background Data Summary: Mean=1.679, Std. Dev.=0.3463, n=16, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8939, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

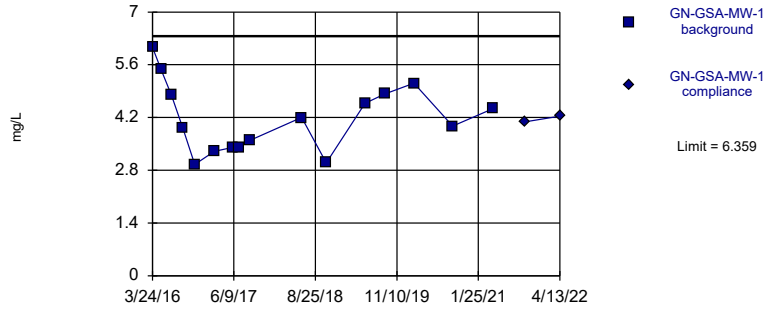


Background Data Summary (based on square transformation): Mean=5.326, Std. Dev.=1.791, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8883, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

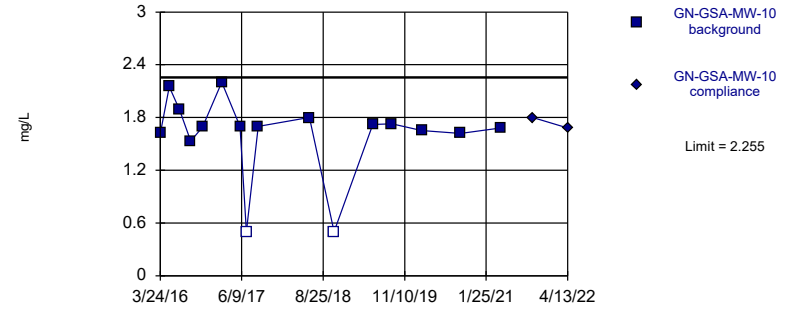


Background Data Summary: Mean=4.188, Std. Dev.=0.9103, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9593, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

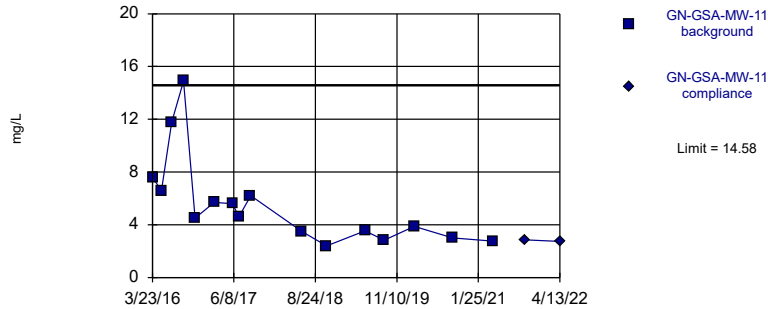


Background Data Summary (based on cube transformation): Mean=4.979, Std. Dev.=2.722, n=16, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.875, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

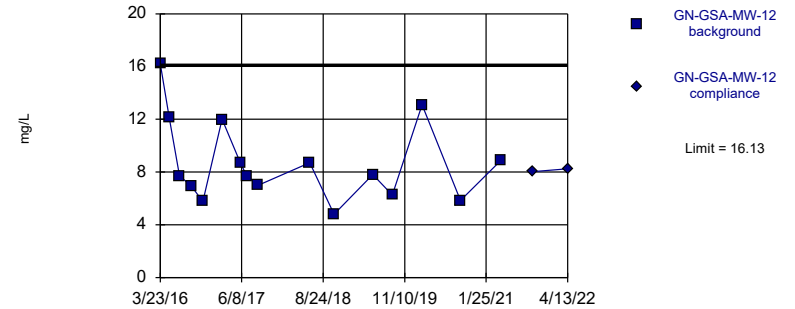


Background Data Summary (based on square root transformation): Mean=2.28, Std. Dev.=0.6446, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8839, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

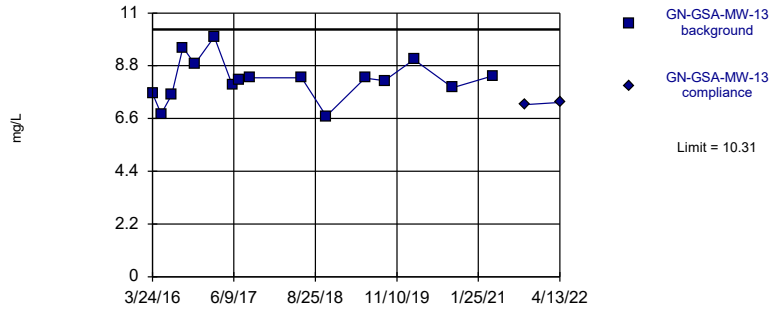


Background Data Summary: Mean=8.719, Std. Dev.=3.106, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8938, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

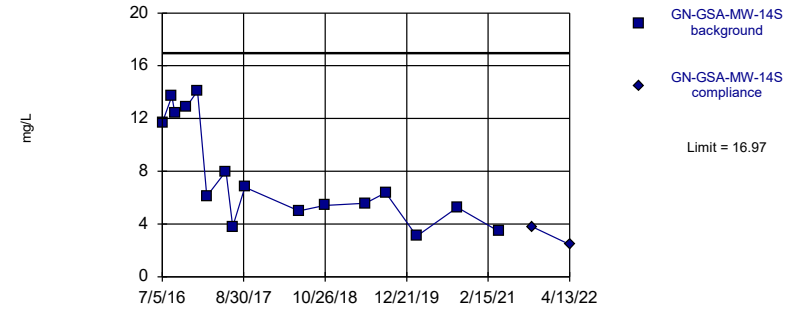


Background Data Summary: Mean=8.234, Std. Dev.=0.871, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9563, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

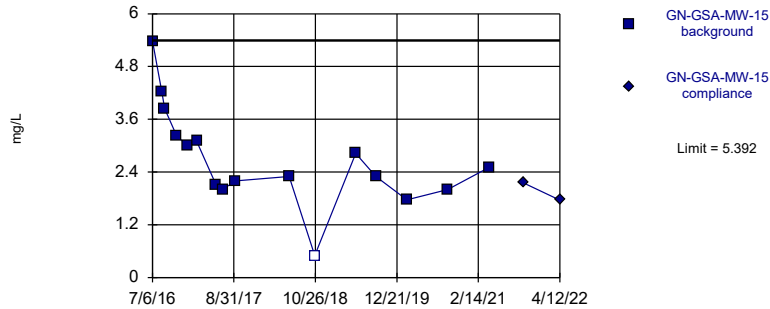


Background Data Summary: Mean=7.728, Std. Dev.=3.872, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8639, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

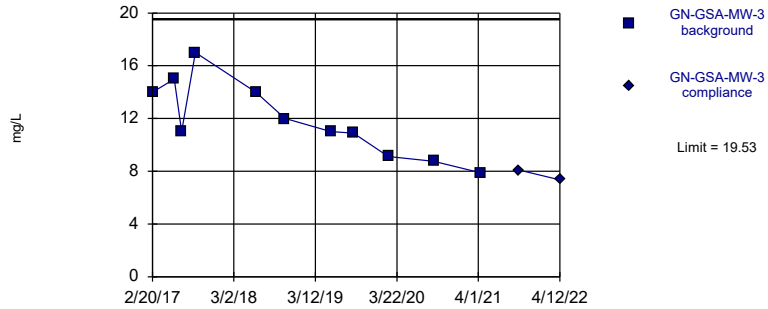
Within Limit

Prediction Limit  
Intrawell Parametric



Within Limit

Prediction Limit  
Intrawell Parametric

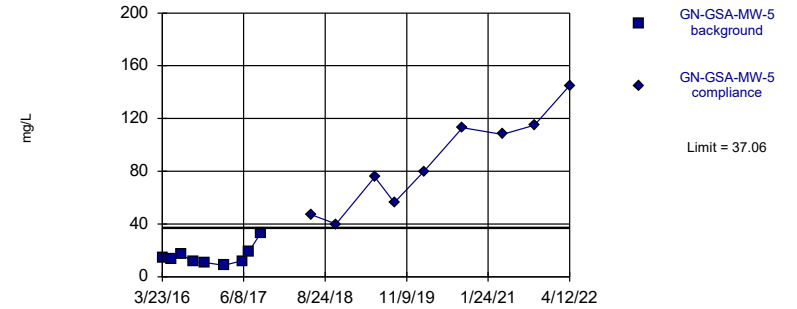


Background Data Summary: Mean=11.88, Std. Dev.=2.842, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9567, critical = 0.792. Kappa = 2.694 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

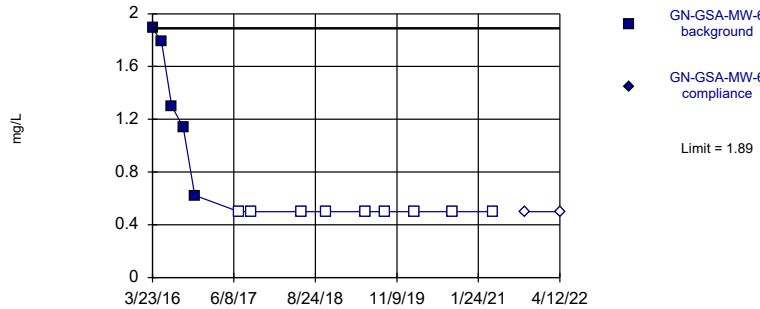


Background Data Summary: Mean=15.51, Std. Dev.=7.278, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7851, critical = 0.764. Kappa = 2.961 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

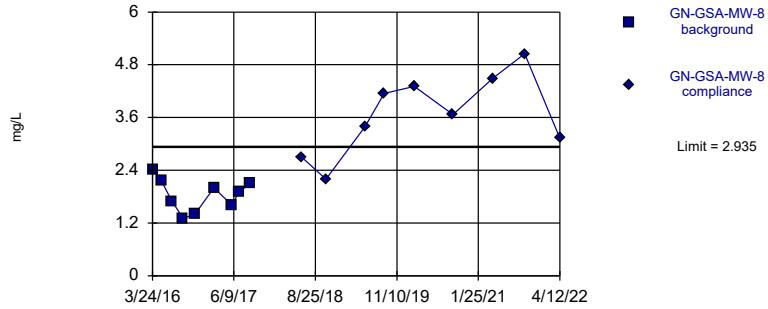
Within Limit

Prediction Limit  
Intrawell Non-parametric



Exceeds Limit

Prediction Limit  
Intrawell Parametric

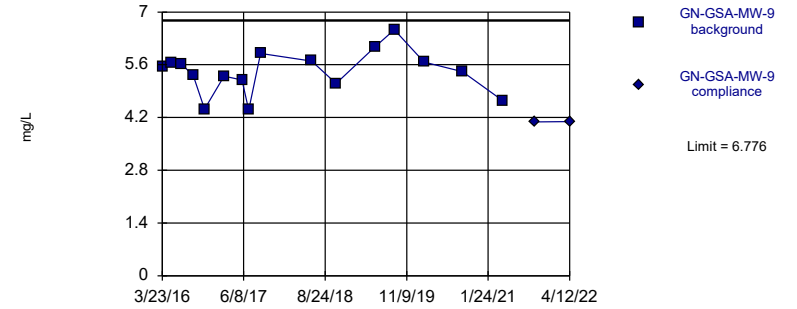


Background Data Summary: Mean=1.843, Std. Dev.=0.3686, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9707, critical = 0.764. Kappa = 2.961 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

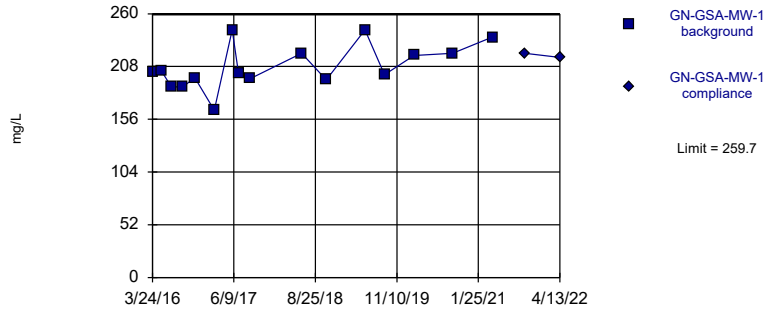


Background Data Summary: Mean=5.406, Std. Dev.=0.5742, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9576, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

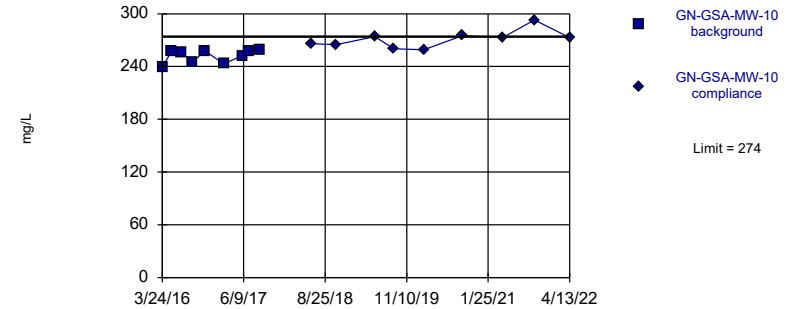


Background Data Summary: Mean=207.7, Std. Dev.=21.8, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9403, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

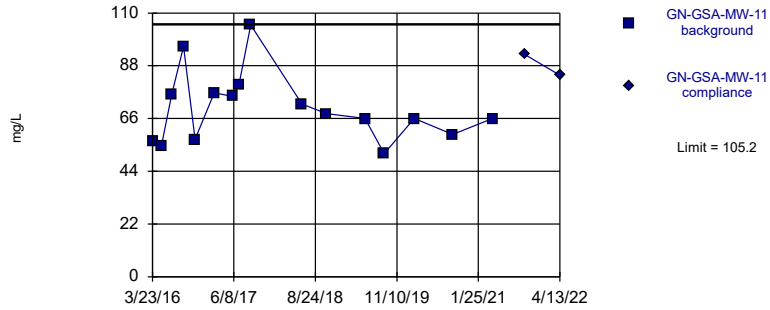


Background Data Summary: Mean=251.8, Std. Dev.=7.496, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8447, critical = 0.764. Kappa = 2.961 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

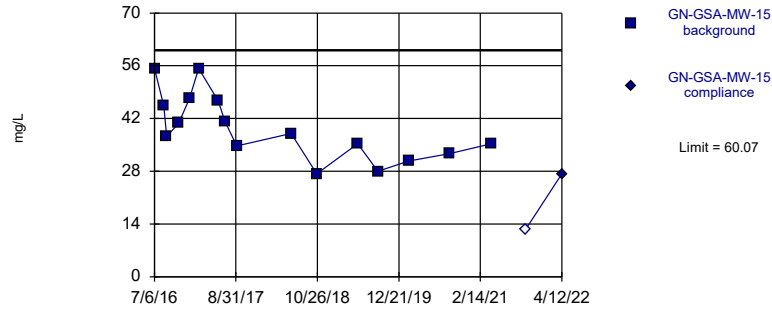
Within Limit

### Prediction Limit Intrawell Parametric



Within Limit

Prediction Limit  
Intrawell Parametric

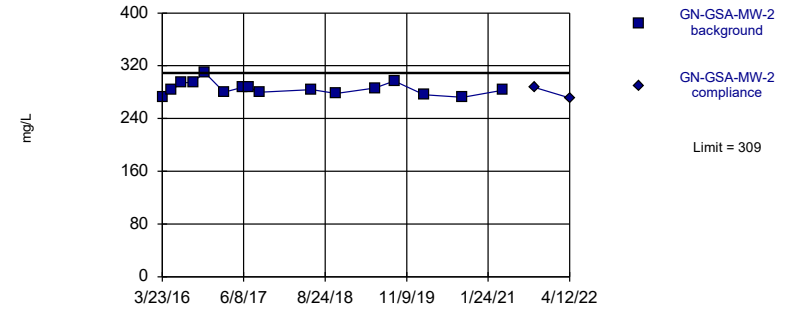


Background Data Summary: Mean=39.45, Std. Dev.=8.643, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9432, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

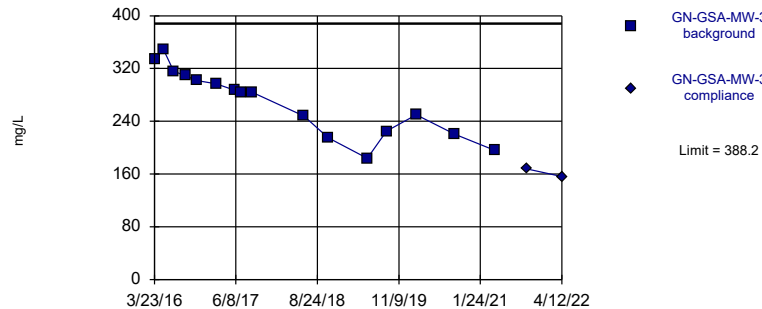


Background Data Summary: Mean=285.3, Std. Dev.=9.95, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9341, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

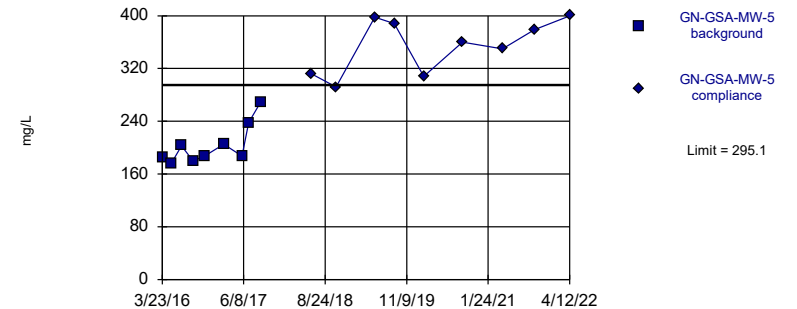


Background Data Summary: Mean=268.7, Std. Dev.=50.11, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9568, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 5/31/2022 10:01 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

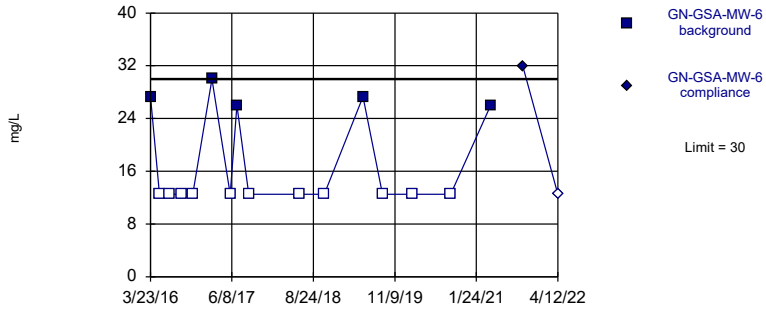
Prediction Limit  
Intrawell Parametric





Within Limit

Prediction Limit  
Intrawell Non-parametric

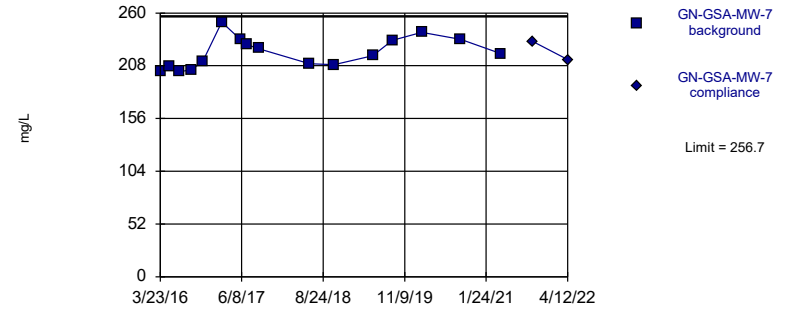


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 16 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: TDS Analysis Run 5/31/2022 10:02 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

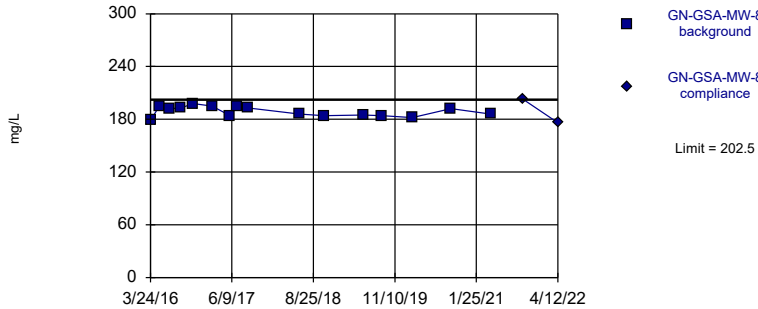


Background Data Summary: Mean=220.7, Std. Dev.=15.11, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9356, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 5/31/2022 10:02 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

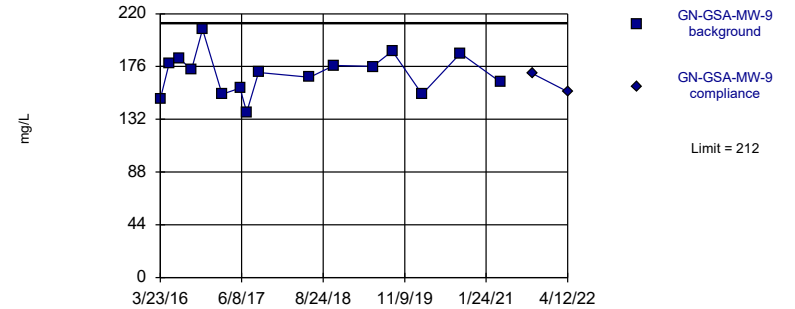


Background Data Summary: Mean=188.9, Std. Dev.=5.691, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9231, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 5/31/2022 10:02 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric



Background Data Summary: Mean=170.2, Std. Dev.=17.53, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9873, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 5/31/2022 10:02 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	44.1	
9/9/2020	44.5	
4/13/2021	44	
10/4/2021		45.4
4/13/2022		47.5

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	99.2	
9/8/2020	99.9	
4/13/2021	97.1	
10/5/2021		108
4/13/2022		107

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	13.1	
9/9/2020	9.3	
4/13/2021	12.3	
10/5/2021		13.8
4/13/2022		15

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	77.8	
9/9/2020	77	
4/13/2021	81.6	
10/5/2021		87.9
4/13/2022		88

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	93.1	
9/9/2020	88.7	
4/13/2021	89.8	
10/4/2021		92.2
4/13/2022		91.8

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	57.3	
9/9/2020	46.7	
4/13/2021	48.4	
10/4/2021		48
4/13/2022		58.9

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	5.62	
9/9/2020	4.73	
4/13/2021	5.17	
10/6/2021		4.62
4/12/2022		4.59



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
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	
2/12/2020	81.4	
9/9/2020	80.9	
4/13/2021	77.5	
10/4/2021		85
4/12/2022		87.1

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
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	
2/12/2020	89.6	
9/9/2020	63.1	
4/13/2021	57.8	
10/4/2021		43.7
4/12/2022		55.1

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/11/2020		76.6
9/8/2020		83.9
4/13/2021		79.2
10/4/2021		81.6
4/12/2022		94.1

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	0.562	
9/8/2020	0.652	
4/13/2021	0.505	
10/4/2021		0.53
4/12/2022		0.516

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	71.2	
9/9/2020	66.7	
4/13/2021	64.1	
10/4/2021		70.4
4/12/2022		71.2

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	55.7	
9/9/2020	55.3	
4/13/2021	52.2	
10/4/2021		55.1
4/12/2022		54.4

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	45.3	
9/8/2020	57.5	
4/13/2021	43.5	
10/5/2021		54.6
4/12/2022		50.4

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.36	
9/9/2020	2.49	
4/13/2021	2.54	
10/4/2021		2.58
4/13/2022		2.17



# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.86	
9/8/2020	2.8	
4/13/2021	3.07	
10/5/2021		3.04
4/13/2022		2.77

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/12/2020		7.16
9/9/2020		6.27
4/13/2021		9.8
10/5/2021		13.8
4/13/2022		19.6

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	4.21	
9/9/2020	2.8	
4/13/2021	3.97	
10/5/2021		3.69
4/13/2022		3.76

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	4.1	
9/9/2020	3.4	
4/13/2021	3.56	
10/4/2021		3.37
4/13/2022		3.01

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.4	
9/9/2020	2.49	
4/13/2021	2.56	
10/4/2021		2.5
4/13/2022		2.42

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	1.8	
9/9/2020	1.95	
4/13/2021	1.86	
10/6/2021		2.07
4/12/2022		1.88

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
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	
2/12/2020	3.66	
9/9/2020	3.44	
4/13/2021	3.55	
10/4/2021		3.59
4/12/2022		3.23

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.49	
9/9/2020	2.74	
4/13/2021	2.76	
10/4/2021		2.88
4/12/2022		2.67



# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	11.2	
9/8/2020	11.7	
4/13/2021	9.78	
10/4/2021		9.45
4/12/2022		7.35

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
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	
2/11/2020	3.36	
9/8/2020	3.29	
4/13/2021	3.54	
10/4/2021		3.61
4/12/2022		3.38

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	3.69	
9/9/2020	3.34	
4/13/2021	3.64	
10/4/2021		3.48
4/12/2022		3.29

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
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	
2/12/2020	1.64	
9/9/2020	1.61	
4/13/2021	1.64	
10/4/2021		1.76
4/12/2022		1.54

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Inrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.24	
9/8/2020	2.06	
4/13/2021	2.14	
10/5/2021		2.16
4/12/2022		1.91

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	5.11	
9/9/2020	3.97	
4/13/2021	4.43	
10/4/2021		4.08
4/13/2022		4.24

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	<1	
9/7/2017	1.7 (J)	
6/12/2018	1.8 (J)	
10/24/2018	<1	
5/21/2019	1.72	
9/3/2019	1.73	
2/12/2020	1.65	
9/8/2020	1.62	
4/13/2021	1.68	
10/5/2021		1.8
4/13/2022		1.68 (J)

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	3.89	
9/9/2020	3.01	
4/13/2021	2.77	
10/5/2021		2.86
4/13/2022		2.73



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	13.1	
9/9/2020	5.85	
4/13/2021	8.86	
10/5/2021		8.02
4/13/2022		8.25

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	9.06	
9/9/2020	7.89	
4/13/2021	8.38	
10/4/2021		7.18
4/13/2022		7.27

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	3.09	
9/9/2020	5.26	
4/13/2021	3.45	
10/4/2021		3.78
4/13/2022		2.44

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	<1	
5/22/2019	2.82	
9/4/2019	2.3	
2/12/2020	1.77	
9/9/2020	2	
4/13/2021	2.51	
10/6/2021		2.15
4/12/2022		1.76 (J)

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	10.7	
9/9/2020	7.77	
4/13/2021	7.44	
10/4/2021		6.86
4/12/2022		8.36

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	9.13	
9/9/2020	8.76	
4/13/2021	7.88	
10/4/2021		8.09
4/12/2022		7.36

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/11/2020		79.7
9/8/2020		113
4/13/2021		108
10/4/2021		115
4/12/2022		145

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
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 (o)	
5/30/2017	5 (o)	
7/5/2017	<1	
9/7/2017	<1	
6/11/2018	<1	
10/22/2018	<1	
5/20/2019	<1	
9/4/2019	<1	
2/11/2020	<1	
9/8/2020	<1	
4/13/2021	<1	
10/4/2021		<1
4/12/2022		<1



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	8.5	
9/9/2020	7.13	
4/13/2021	6.37	
10/4/2021		6.02
4/12/2022		5.75

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/12/2020		4.31
9/9/2020		3.67
4/13/2021		4.49
10/4/2021		5.05
4/12/2022		3.13

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	5.67	
9/8/2020	5.42	
4/13/2021	4.65	
10/5/2021		4.08
4/12/2022		4.09

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	219	
9/9/2020	221	
4/13/2021	237	
10/4/2021		221
4/13/2022		217

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/12/2020		259
9/8/2020		275
4/13/2021		273
10/5/2021		293
4/13/2022		273

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	66	
9/9/2020	59.3	
4/13/2021	66	
10/5/2021		92.7
4/13/2022		84

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	256	
9/9/2020	230	
4/13/2021	260	
10/5/2021		255
4/13/2022		250

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	282	
9/9/2020	271	
4/13/2021	286	
10/4/2021		277
4/13/2022		266



# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	189	
9/9/2020	198	
4/13/2021	191	
10/4/2021		183
4/13/2022		187

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	30.7	
9/9/2020	32.7	
4/13/2021	35.3	
10/6/2021		<25
4/12/2022		27.3

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	276	
9/9/2020	272	
4/13/2021	283	
10/4/2021		287
4/12/2022		271

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	250	
9/9/2020	220	
4/13/2021	196	
10/4/2021		168
4/12/2022		156

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/11/2020		308
9/8/2020		360
4/13/2021		350
10/4/2021		379
4/12/2022		400

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	<25	
9/8/2020	<25	
4/13/2021	26	
10/4/2021		32
4/12/2022		<25

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	241	
9/9/2020	234	
4/13/2021	220	
10/4/2021		232
4/12/2022		214

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	182	
9/9/2020	192	
4/13/2021	186	
10/4/2021		203
4/12/2022		176



# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/31/2022 10:04 AM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	153	
9/8/2020	187	
4/13/2021	163	
10/5/2021		170
4/12/2022		155

FIGURE E.

# Interwell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:06 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GN-GSA-MW-1	0.125	n/a	4/13/2022	0.307	Yes	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-6	7.53	5.25	4/12/2022	4.38	Yes	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2

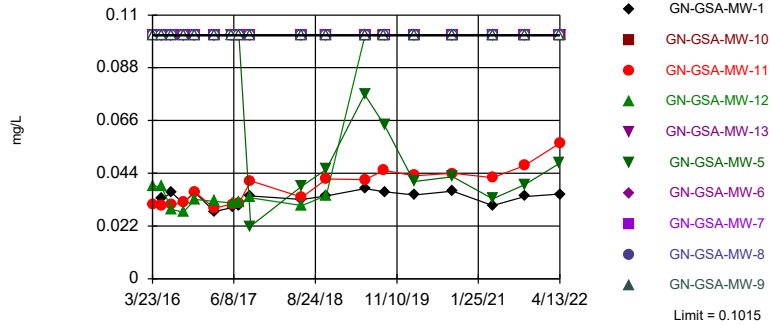
# Interwell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:06 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GN-GSA-MW-1	0.1015	n/a	4/13/2022	0.0353J	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-10	0.1015	n/a	4/13/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-11	0.1015	n/a	4/13/2022	0.0565J	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-12	0.1015	n/a	4/13/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-13	0.1015	n/a	4/13/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-5	0.1015	n/a	4/12/2022	0.0481J	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-6	0.1015	n/a	4/12/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-7	0.1015	n/a	4/12/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-8	0.1015	n/a	4/12/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-9	0.1015	n/a	4/12/2022	0.1015ND	No	72	n/a	n/a	98.61	n/a	n/a	0.0003671	NP Inter (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>0.125</b>	<b>n/a</b>	<b>4/13/2022</b>	<b>0.307</b>	<b>Yes</b>	<b>76</b>	<b>n/a</b>	<b>n/a</b>	<b>40.79</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0003321</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	GN-GSA-MW-10	0.125	n/a	4/13/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-11	0.125	n/a	4/13/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-12	0.125	n/a	4/13/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-13	0.125	n/a	4/13/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-5	0.125	n/a	4/12/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-6	0.125	n/a	4/12/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-7	0.125	n/a	4/12/2022	0.0724J	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-8	0.125	n/a	4/12/2022	0.0621J	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-9	0.125	n/a	4/12/2022	0.125ND	No	76	n/a	n/a	40.79	n/a	n/a	0.0003321	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-1	7.53	5.25	4/13/2022	7.5	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-10	7.53	5.25	4/13/2022	6.85	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-11	7.53	5.25	4/13/2022	5.29	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-12	7.53	5.25	4/13/2022	6.74	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-13	7.53	5.25	4/13/2022	6.84	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-5	7.53	5.25	4/12/2022	6.32	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
<b>pH (pH)</b>	<b>GN-GSA-MW-6</b>	<b>7.53</b>	<b>5.25</b>	<b>4/12/2022</b>	<b>4.38</b>	<b>Yes</b>	<b>76</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0006643</b>	<b>NP Inter (normality) 1 of 2</b>
pH (pH)	GN-GSA-MW-7	7.53	5.25	4/12/2022	6.73	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-8	7.53	5.25	4/12/2022	7.22	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-9	7.53	5.25	4/12/2022	6.22	No	76	n/a	n/a	0	n/a	n/a	0.0006643	NP Inter (normality) 1 of 2

Within Limit

Prediction Limit  
Interwell Non-parametric

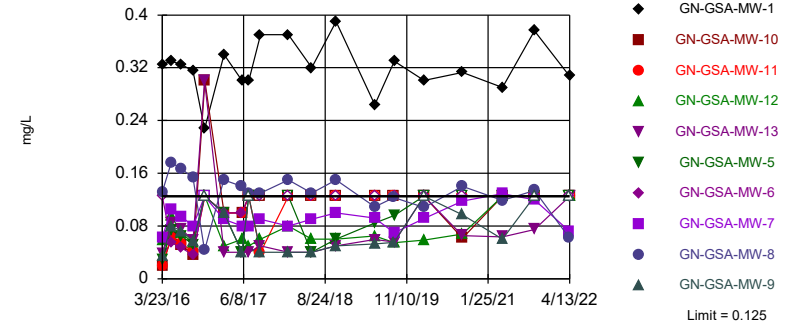


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 72 background values. 98.61% NDs. Annual per-constituent alpha = 0.007317. Individual comparison alpha = 0.0003671 (1 of 2). Comparing 10 points to limit.

Constituent: Boron Analysis Run 5/31/2022 10:05 AM View: Appendix III - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit: GN-GSA-MW-1

Prediction Limit  
Interwell Non-parametric

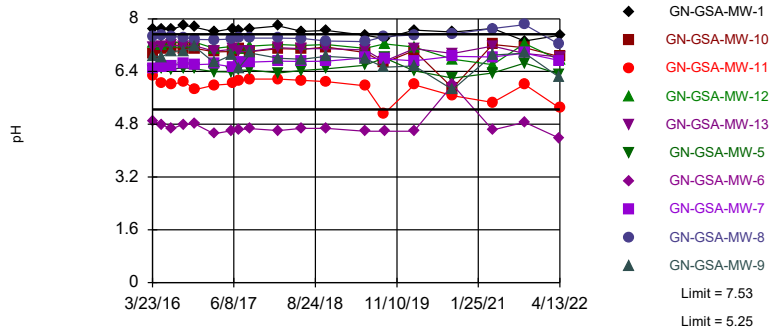


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 76 background values. 40.79% NDs. Annual per-constituent alpha = 0.006622. Individual comparison alpha = 0.0003321 (1 of 2). Comparing 10 points to limit.

Constituent: Fluoride Analysis Run 5/31/2022 10:05 AM View: Appendix III - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limits: GN-GSA-MW-6

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 76 background values. Annual per-constituent alpha = 0.01324. Individual comparison alpha = 0.0006643 (1 of 2). Comparing 10 points to limit.

Constituent: pH Analysis Run 5/31/2022 10:05 AM View: Appendix III - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/31/2022 10:06 AM View: Appendix III - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-11	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-12	GN-GSA-MW-9	GN-GSA-MW-1
3/23/2016	<0.1015	0.0309 (J)	<0.1015	<0.1015	<0.1015	<0.1015	0.0387 (J)	<0.1015	
3/24/2016									0.0311 (J)
5/10/2016			<0.1015	<0.1015			0.0384 (J)		0.0334 (J)
5/11/2016	<0.1015	0.0306 (J)			<0.1015	<0.1015		<0.1015	
7/5/2016			<0.1015						0.0359 (J)
7/6/2016	<0.1015	0.0307 (J)		<0.1015	<0.1015	<0.1015	0.029 (J)	<0.1015	
8/23/2016									
9/6/2016	<0.1015		<0.1015		<0.1015	<0.1015	0.0278 (J)		0.0316 (J)
9/7/2016		0.0319 (J)		<0.1015				<0.1015	
11/8/2016	<0.1015		<0.1015	<0.1015	<0.1015	<0.1015		<0.1015	0.0361 (J)
11/9/2016		0.0362 (J)					0.0331 (J)		
1/3/2017									
2/20/2017	<0.1015			<0.1015	<0.1015	<0.1015			
2/21/2017		0.0295 (J)	<0.1015				0.0323 (J)	<0.1015	
2/22/2017									0.028 (J)
5/30/2017	<0.1015				<0.1015			<0.1015	
5/31/2017		0.0312 (J)	<0.1015	<0.1015		<0.1015	0.0316 (J)		0.0297 (J)
7/5/2017	<0.1015	0.0315 (J)	<0.1015	<0.1015	<0.1015	<0.1015	0.0318 (J)	<0.1015	0.0302 (J)
9/5/2017			<0.1015	<0.1015					
9/7/2017	0.022 (J)	0.0408 (J)			<0.1015	<0.1015	0.0338 (J)	<0.1015	0.0345 (J)
6/11/2018	0.0386 (J)				<0.1015	<0.1015			
6/12/2018		0.034 (J)	<0.1015	<0.1015			0.0305 (J)	<0.1015	0.0331 (J)
10/22/2018	0.0456 (J)		<0.1015		<0.1015	<0.1015		<0.1015	
10/23/2018				<0.1015			0.0347 (J)		0.0345 (J)
10/24/2018		0.0416 (J)							
5/20/2019	0.0769 (J)		<0.1015		<0.1015	<0.1015			
5/21/2019		0.0413 (J)					<0.1015	<0.1015	0.0376 (J)
5/22/2019				<0.1015					
9/3/2019		0.0452 (J)						<0.1015	
9/4/2019	0.0641 (J)		<0.1015	<0.1015	<0.1015	<0.1015	<0.1015		0.0363 (J)
2/11/2020	0.0406 (J)				<0.1015	<0.1015			
2/12/2020		0.043 (J)	<0.1015	<0.1015			<0.1015	<0.1015	0.0349 (J)
9/8/2020	0.0425 (J)				<0.1015			<0.1015	
9/9/2020		0.044 (J)	<0.1015	<0.1015		<0.1015	<0.1015		0.0366 (J)
4/13/2021	0.0333 (J)	0.0422 (J)	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015	0.0306 (J)
10/4/2021	0.0392 (J)		<0.1015	<0.1015	<0.1015	<0.1015			0.0343 (J)
10/5/2021		0.0472 (J)					<0.1015	<0.1015	
10/6/2021									
4/12/2022	0.0481 (J)		<0.1015	<0.1015	<0.1015	<0.1015		<0.1015	
4/13/2022		0.0565 (J)					<0.1015		0.0353 (J)

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/31/2022 10:06 AM View: Appendix III - Interwell  
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	<0.1015	<0.1015	<0.1015		
5/10/2016		<0.1015			
5/11/2016	<0.1015		<0.1015		
7/5/2016				<0.1015	
7/6/2016	<0.1015	<0.1015	<0.1015		<0.1015
8/23/2016				<0.1015	<0.1015
9/6/2016	<0.1015	<0.1015	<0.1015		
9/7/2016				<0.1015	<0.1015
11/8/2016	<0.1015	<0.1015		<0.1015	<0.1015
11/9/2016			<0.1015		
1/3/2017				0.0211 (J)	<0.1015
2/20/2017	<0.1015				<0.1015
2/21/2017			<0.1015	<0.1015	
2/22/2017		<0.1015			
5/30/2017	<0.1015				
5/31/2017		<0.1015	<0.1015	<0.1015	<0.1015
7/5/2017	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
9/5/2017				<0.1015	<0.1015
9/7/2017	<0.1015	<0.1015	<0.1015		
6/11/2018					
6/12/2018	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
10/22/2018	<0.1015				
10/23/2018		<0.1015		<0.1015	<0.1015
10/24/2018			<0.1015		
5/20/2019					
5/21/2019	<0.1015	<0.1015	<0.1015		
5/22/2019				<0.1015	<0.1015
9/3/2019	<0.1015		<0.1015		
9/4/2019		<0.1015		<0.1015	<0.1015
2/11/2020					
2/12/2020	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
9/8/2020			<0.1015		
9/9/2020	<0.1015	<0.1015		<0.1015	<0.1015
4/13/2021	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
10/4/2021	<0.1015	<0.1015		<0.1015	
10/5/2021			<0.1015		
10/6/2021					<0.1015
4/12/2022	<0.1015				<0.1015
4/13/2022		<0.1015	<0.1015	<0.1015	

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/31/2022 10:06 AM View: Appendix III - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-2 (bg)	GN-GSA-MW-11	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-9	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-1
3/23/2016	0.058 (J)	0.022 (J)	0.02 (J)	0.06 (J)	0.028 (J)	0.035 (J)	<0.125	0.063 (J)	
3/24/2016									0.325
5/10/2016	0.095 (J)	0.068 (J)		0.111 (J)					0.33
5/11/2016			0.063 (J)		0.074 (J)	0.08 (J)	0.055 (J)	0.105 (J)	
7/5/2016		0.052 (J)							0.325
7/6/2016	0.069 (J)		0.053 (J)	0.089 (J)	0.065 (J)	0.072 (J)	0.047 (J)	0.094 (J)	
8/23/2016									
9/6/2016	0.055 (J)	0.038 (J)			0.052 (J)		0.036 (J)	0.08 (J)	0.315
9/7/2016			0.041 (J)	0.073 (J)		0.057 (J)			
11/8/2016		<0.125		<0.125	<0.125	<0.125	<0.125	<0.125	0.227 (J)
11/9/2016	<0.125		<0.125						
1/3/2017									
2/20/2017				0.05 (J)	0.1		0.1	0.09 (J)	
2/21/2017	0.05 (J)	0.1	0.1			0.1			
2/22/2017									0.34
5/30/2017					0.04 (J)	0.04 (J)	0.1		
5/31/2017	0.06 (J)	0.1	0.1	0.06 (J)				0.08 (J)	0.3
7/5/2017	0.05 (J)	<0.125	<0.125	0.05 (J)	<0.125	<0.125	<0.125	0.08 (J)	0.3
9/5/2017		<0.125		0.06 (J)					
9/7/2017	0.06 (J)		0.04 (J)		<0.125	0.04 (J)	<0.125	0.09 (J)	0.37
2/5/2018	0.08 (J)	0.04 (J)							0.37
2/6/2018			<0.125	0.06 (J)	<0.125	0.04 (J)	<0.125	0.08 (J)	
2/7/2018									
6/11/2018					0.04 (J)		<0.125	0.09 (J)	
6/12/2018	0.06 (J)	<0.125	<0.125	0.05 (J)		0.04 (J)			0.32
10/22/2018		<0.125			0.06 (J)	0.05 (J)	<0.125	0.1	
10/23/2018	0.06 (J)			0.05 (J)					0.39
10/24/2018			<0.125						
5/20/2019		<0.125			0.0842 (J)		<0.125	0.0919 (J)	
5/21/2019	0.0649 (J)		<0.125			0.0526 (J)			0.264
5/22/2019				0.0515 (J)					
9/3/2019			<0.125			0.0554 (J)			
9/4/2019	0.0547 (J)	<0.125		0.0594 (J)	0.0962 (J)		<0.125	0.07 (J)	0.33
2/11/2020					<0.125		<0.125	0.0912 (J)	
2/12/2020	0.0586 (J)	<0.125	<0.125	0.0566 (J)		<0.125			0.301
9/8/2020					<0.125	0.097 (J)	<0.125		
9/9/2020	0.068 (J)	0.0644 (J)	<0.125	0.0748 (J)				0.118	0.313
4/13/2021	<0.125	<0.125	<0.125	0.069 (J)	<0.125	0.0602 (J)	<0.125	0.129	0.29
10/4/2021		0.0664 (J)		0.0637 (J)	<0.125		<0.125	0.12	0.376
10/5/2021	<0.125		<0.125			<0.125			
10/6/2021									
4/12/2022		<0.125		<0.125	<0.125	<0.125	<0.125	0.0724 (J)	
4/13/2022	<0.125		<0.125						0.307



# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/31/2022 10:06 AM View: Appendix III - Interwell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-8	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016					
3/24/2016	0.02 (J)	0.132 (J)	0.039 (J)		
5/10/2016			0.085 (J)		
5/11/2016	0.062 (J)	0.176 (J)			
7/5/2016				0.072 (J)	
7/6/2016	0.051 (J)	0.167 (J)	0.075 (J)		0.062 (J)
8/23/2016				0.066 (J)	0.045 (J)
9/6/2016	0.037 (J)	0.153 (J)	0.058 (J)		
9/7/2016				0.062 (J)	0.042 (J)
11/8/2016		0.043 (J)	0.3 (U)	<0.125	<0.125
11/9/2016	0.3 (U)				
1/3/2017				<0.125	<0.125
2/20/2017		0.15			0.1
2/21/2017	0.1			0.1	
2/22/2017			0.04 (J)		
5/30/2017		0.14			
5/31/2017	0.1		0.04 (J)	0.06 (J)	0.1
7/5/2017	<0.125	0.13	0.04 (J)	0.04 (J)	<0.125
9/5/2017				0.06 (J)	<0.125
9/7/2017	<0.125	0.13	0.05 (J)		
2/5/2018			0.04 (J)		
2/6/2018	<0.125	0.15		0.06 (J)	
2/7/2018					<0.125
6/11/2018					
6/12/2018	<0.125	0.13	0.04 (J)	0.05 (J)	<0.125
10/22/2018		0.15			
10/23/2018			0.05 (J)	0.07 (J)	<0.125
10/24/2018	<0.125				
5/20/2019					
5/21/2019	<0.125	0.109	0.0595 (J)		
5/22/2019				0.0601 (J)	<0.125
9/3/2019	<0.125	0.123			
9/4/2019			0.0555 (J)	0.0703 (J)	<0.125
2/11/2020					
2/12/2020	<0.125	0.108	<0.125	<0.125	<0.125
9/8/2020	0.0617 (J)				
9/9/2020		0.14	0.0655 (J)	0.0847 (J)	<0.125
4/13/2021	<0.125	0.119	0.0633 (J)	<0.125	<0.125
10/4/2021		0.134	0.0748 (J)	0.0838 (J)	
10/5/2021	<0.125				
10/6/2021					<0.125
4/12/2022		0.0621 (J)			<0.125
4/13/2022	<0.125		<0.125	<0.125	

# Prediction Limit

Constituent: pH (pH) Analysis Run 5/31/2022 10:06 AM View: Appendix III - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-2 (bg)	GN-GSA-MW-11	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-9	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-1
3/23/2016	7.28	7.18	6.26	6.83	6.41	6.88	4.91	6.5	
3/24/2016									7.7
5/10/2016	7.19	7.2		6.84					7.67
5/11/2016			6.04		6.5	6.84	4.79	6.54	
7/5/2016		7.15							7.68
7/6/2016	7.29		6	6.94	6.47	7.01	4.66	6.58	
8/23/2016									
9/6/2016	7.29	7.17			6.51		4.8	6.64	7.8
9/7/2016			6.1	6.84		7.03			
11/8/2016		7.12		6.84	6.48	7.15	4.81	6.61	7.74
11/9/2016	7.29		5.85						
1/3/2017									
2/20/2017				7.04	6.39		4.51	6.63	
2/21/2017	7.1	7.12	5.99			6.67			
2/22/2017									7.61
5/30/2017					6.38	6.91	4.61		
5/31/2017	7.16	7.17	6.03	6.91				6.54	7.7
7/5/2017	7.08	7.18	6.13	7.02	6.44	6.51	4.64	6.67	7.66
9/5/2017		7.17		6.78					
9/7/2017	7.17		6.17		6.44	6.96	4.67	6.69	7.7
2/5/2018	7.22	7.12							7.78
2/6/2018			6.17	6.96	6.36	6.8	4.61	6.71	
2/7/2018									
6/11/2018					6.43		4.68	6.7	
6/12/2018	7.19	7.19	6.13	6.76		6.77			7.62
10/22/2018		7.06			6.48	6.86	4.68	6.71	
10/23/2018	7.22			6.59					7.65
10/24/2018			6.09						
5/20/2019		7.13			6.59		4.59	6.81	
5/21/2019	7.1		5.97			6.79			7.5
5/22/2019				6.38					
9/3/2019			5.12			6.53			
9/4/2019	7.24	7.16		6.71	6.81		4.59	6.78	7.4
2/11/2020					6.42		4.59	6.72	
2/12/2020	7.14	7.11	6	6.98		6.57			7.66
9/8/2020					6.2	5.85	6		
9/9/2020	6.77	7.22	5.67	6.48				6.86	7.6
4/13/2021	6.61	6.94	5.46	6.71	6.36	6.9	4.63	6.84	7.7
10/4/2021		7.13		6.43	6.66		4.86	6.96	7.33
10/5/2021	7.25		6.01			6.96			
10/6/2021									
4/12/2022		6.48		5.57	6.32	6.22	4.38	6.73	
4/13/2022	6.74		5.29						7.5

# Prediction Limit

Constituent: pH (pH) Analysis Run 5/31/2022 10:06 AM View: Appendix III - Interwell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-8	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016					
3/24/2016	6.95	7.45	7.14		
5/10/2016			7.17		
5/11/2016	7.07	7.48			
7/5/2016				7.44	
7/6/2016	7.13	7.46	7.19		6.1
8/23/2016				7.47	5.87
9/6/2016	7.1	7.44	7.18		
9/7/2016				7.51	5.92
11/8/2016		7.37	7.18	7.37	5.91
11/9/2016	7.1				
1/3/2017				7.37	5.93
2/20/2017		7.36			5.91
2/21/2017	7			7.41	
2/22/2017			7.02		
5/30/2017		7.38			
5/31/2017	7.01		7.07	7.47	6
7/5/2017	7.07	7.44	7	7.5	6
9/5/2017				7.39	5.9
9/7/2017	7.01	7.41	7.02		
2/5/2018			7.12		
2/6/2018	7.09	7.41		7.47	
2/7/2018					5.86
6/11/2018					
6/12/2018	7.07	7.4	7.09	7.53	6.05
10/22/2018		7.33			
10/23/2018			7.09	7.4	5.84
10/24/2018	7.14				
5/20/2019					
5/21/2019	6.98	7.31	7.05		
5/22/2019				7.43	5.81
9/3/2019	6.67	7.46			
9/4/2019			6.71	7.45	5.67
2/11/2020					
2/12/2020	7.03	7.51	7.09	7.47	5.72
9/8/2020	5.9				
9/9/2020		7.54	6.95	7.32	5.71
4/13/2021	7.22	7.7	7.17	7.33	5.84
10/4/2021		7.82	6.95	7.21	
10/5/2021	7.12				
10/6/2021					5.64
4/12/2022		7.22			5.25
4/13/2022	6.85		6.84	7.4	

FIGURE F.

# Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:10 AM

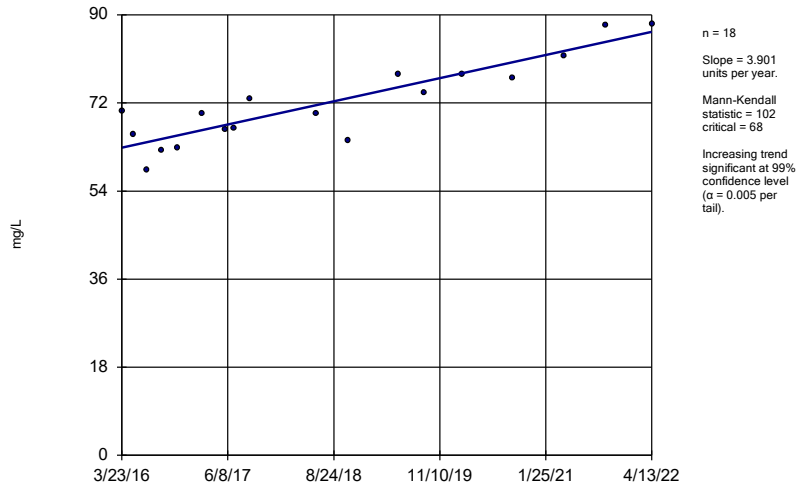
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-12	3.901	102	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-15 (bg)	-0.8106	-117	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-3 (bg)	-9.601	-119	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-5	6.556	115	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-11	1.703	117	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-14S (bg)	-0.4589	-110	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-15 (bg)	-0.3293	-87	-68	Yes	18	5.556	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-3 (bg)	-0.09949	-77	-68	Yes	18	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-15 (bg)	-0.05887	-104	-74	Yes	19	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-3 (bg)	-0.07961	-75	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-14S (bg)	-1.698	-97	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-0.3716	-87	-68	Yes	18	5.556	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-3 (bg)	-3.054	-137	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-5	20.37	115	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-8	0.5214	93	68	Yes	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-15 (bg)	-4.203	-92	-68	Yes	18	5.556	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-3 (bg)	-28.38	-131	-68	Yes	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-5	39.13	116	68	Yes	18	0	n/a	n/a	0.01	NP

# Trend Tests - Prediction Limit Exceedances - All Results

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 5/31/2022, 10:10 AM

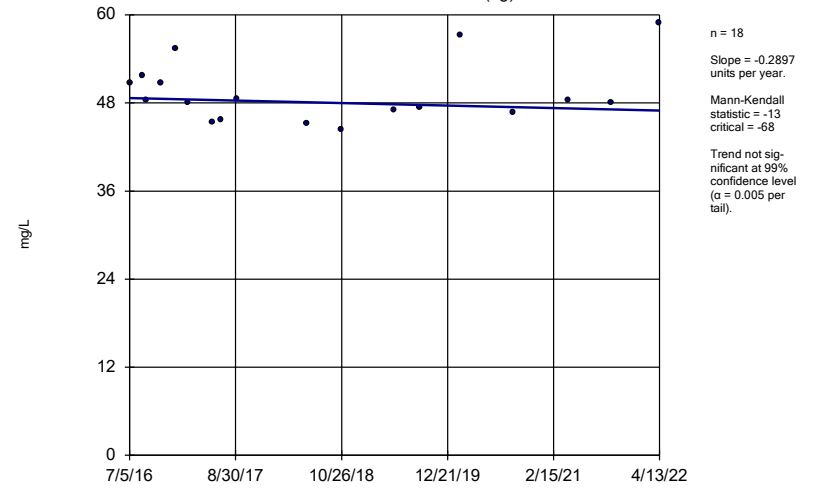
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>3.901</b>	<b>102</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-14S (bg)	-0.2897	-13	-68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.8106</b>	<b>-117</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-2 (bg)	1.479	52	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-9.601</b>	<b>-119</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>6.556</b>	<b>115</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>1.703</b>	<b>117</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-0.4589</b>	<b>-110</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.3293</b>	<b>-87</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>5.556</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	GN-GSA-MW-2 (bg)	-0.001806	-3	-68	No	18	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-0.09949</b>	<b>-77</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride (mg/L)	GN-GSA-MW-1	-0.0004986	-5	-74	No	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-14S (bg)	0.003036	30	74	No	19	26.32	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-15 (bg)	0	65	74	No	19	73.68	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-2 (bg)	0.004864	55	74	No	19	52.63	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-3 (bg)	0	-4	-74	No	19	10.53	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-14S (bg)	-0.01357	-39	-74	No	19	0	n/a	n/a	0.01	NP
<b>pH (pH)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.05887</b>	<b>-104</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (pH)	GN-GSA-MW-2 (bg)	-0.01583	-55	-74	No	19	0	n/a	n/a	0.01	NP
<b>pH (pH)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-0.07961</b>	<b>-75</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (pH)	GN-GSA-MW-6	-0.02307	-38	-74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-1.698</b>	<b>-97</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.3716</b>	<b>-87</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>5.556</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GN-GSA-MW-2 (bg)	0.2537	41	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-3.054</b>	<b>-137</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>20.37</b>	<b>115</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>0.5214</b>	<b>93</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GN-GSA-MW-14S (bg)	-3.067	-61	-68	No	18	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-4.203</b>	<b>-92</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>5.556</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GN-GSA-MW-2 (bg)	-1.64	-33	-68	No	18	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-28.38</b>	<b>-131</b>	<b>-68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>39.13</b>	<b>116</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

Sen's Slope Estimator  
GN-GSA-MW-12



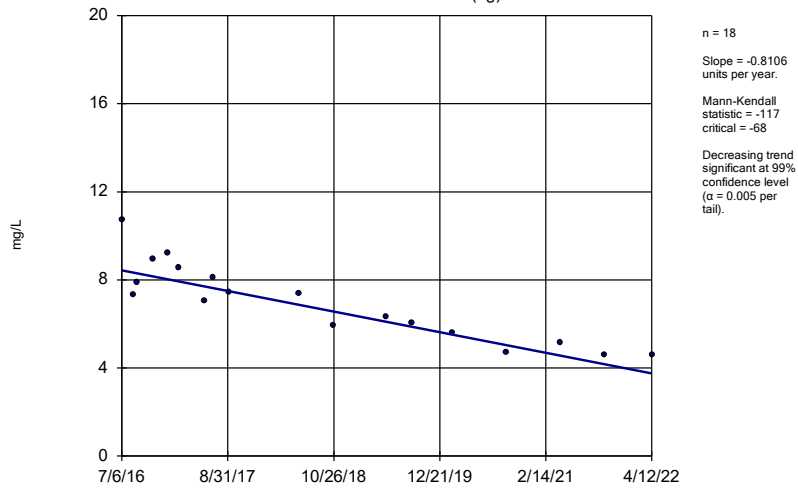
Constituent: Calcium Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-14S (bg)



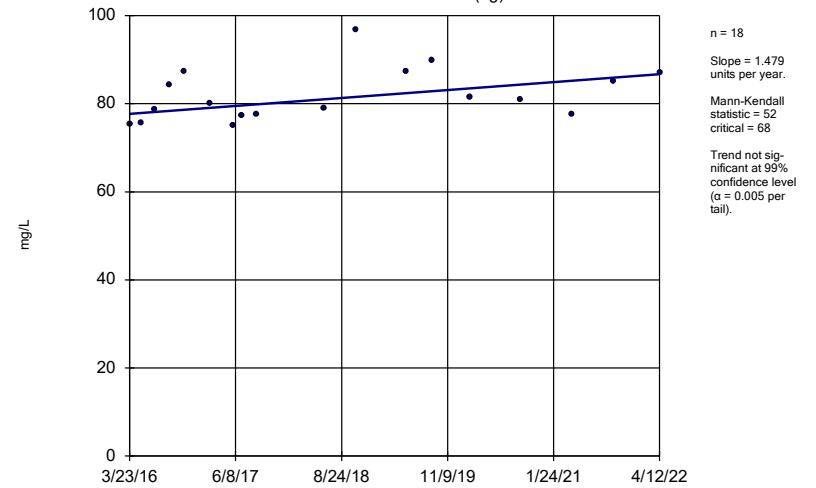
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-15 (bg)



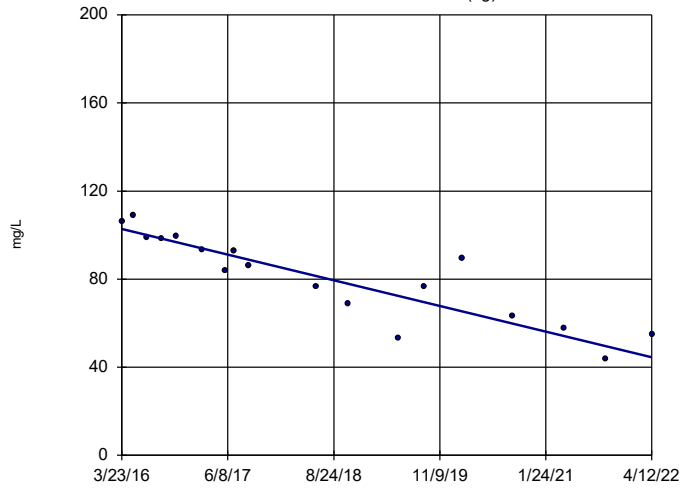
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-2 (bg)



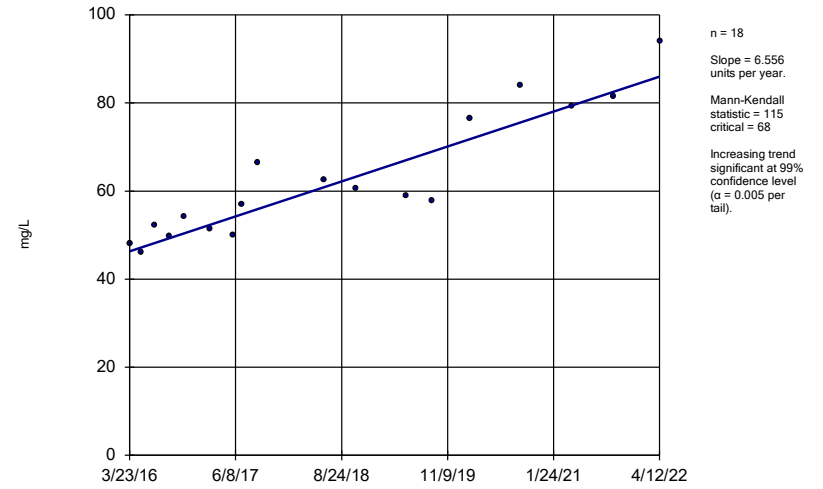
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-3 (bg)



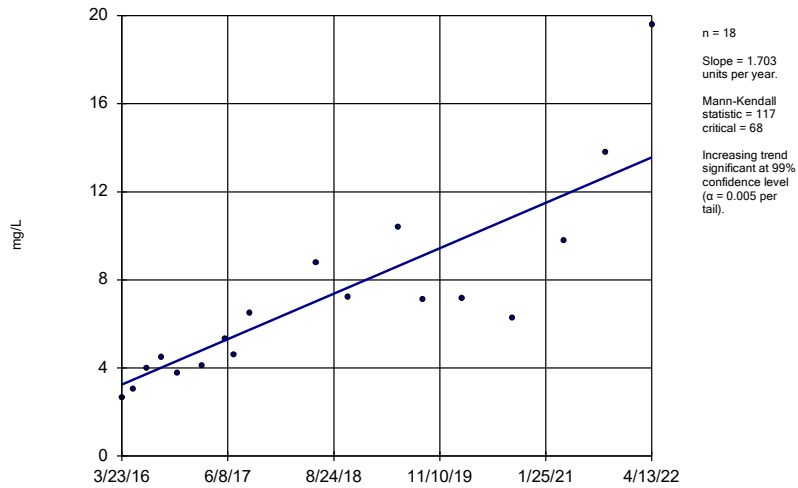
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-5



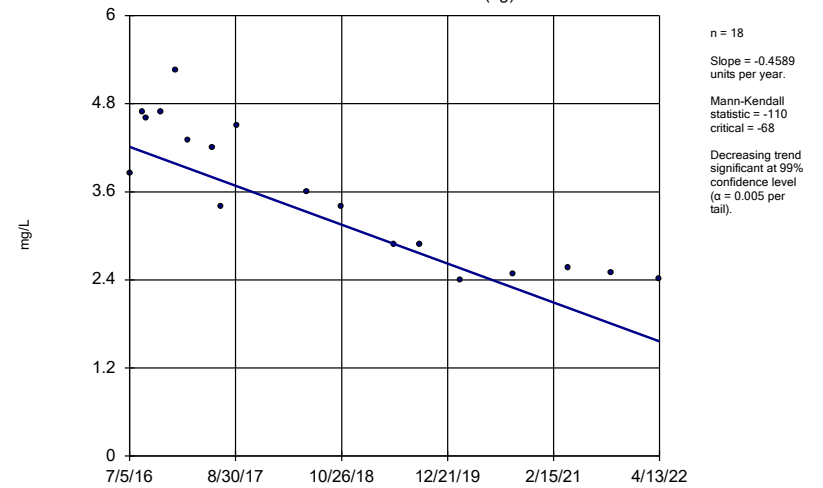
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-11



Constituent: Chloride Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

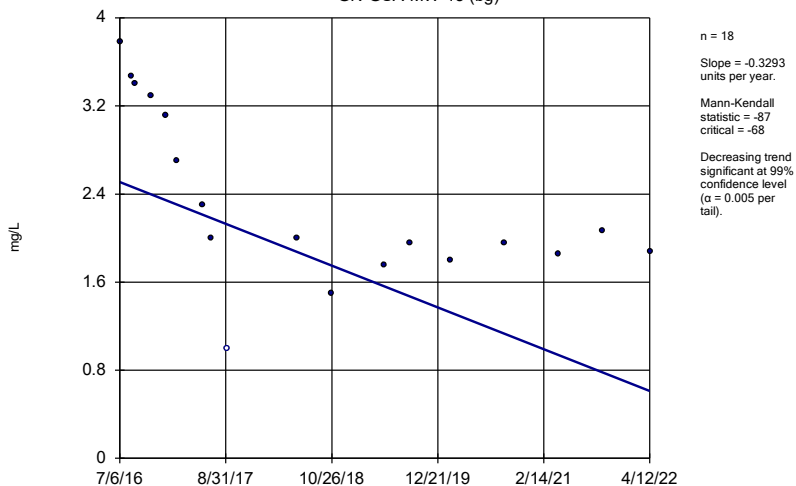
Sen's Slope Estimator  
GN-GSA-MW-14S (bg)



Constituent: Chloride Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

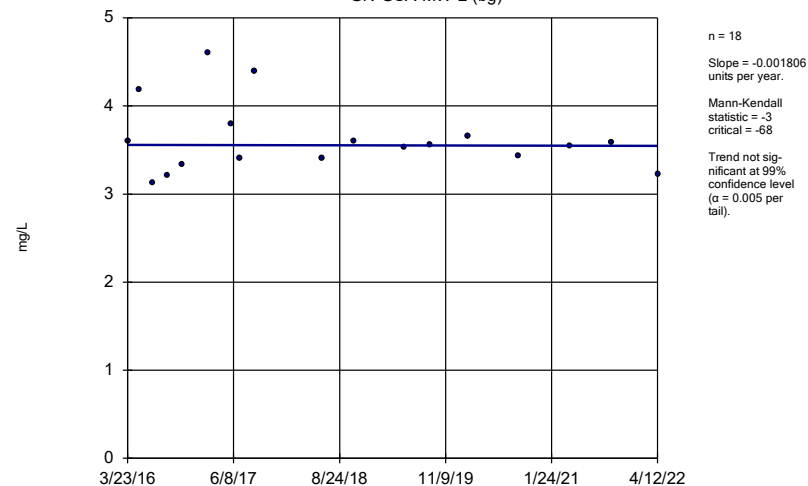


Sen's Slope Estimator  
 GN-GSA-MW-15 (bg)



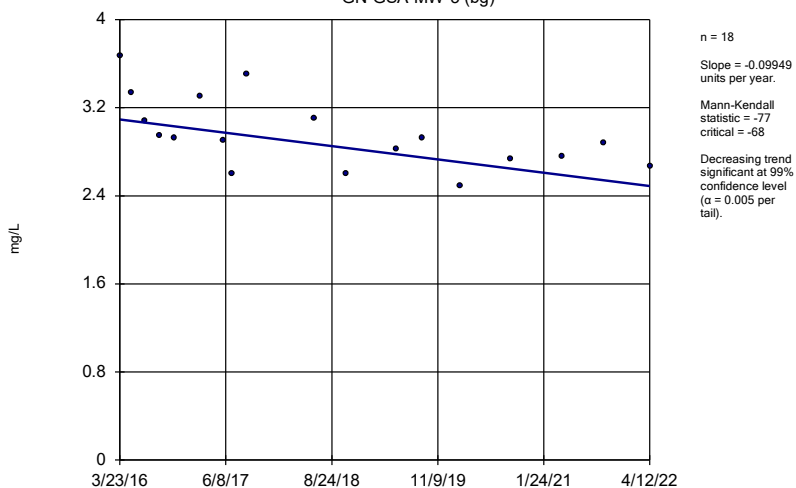
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
 GN-GSA-MW-2 (bg)



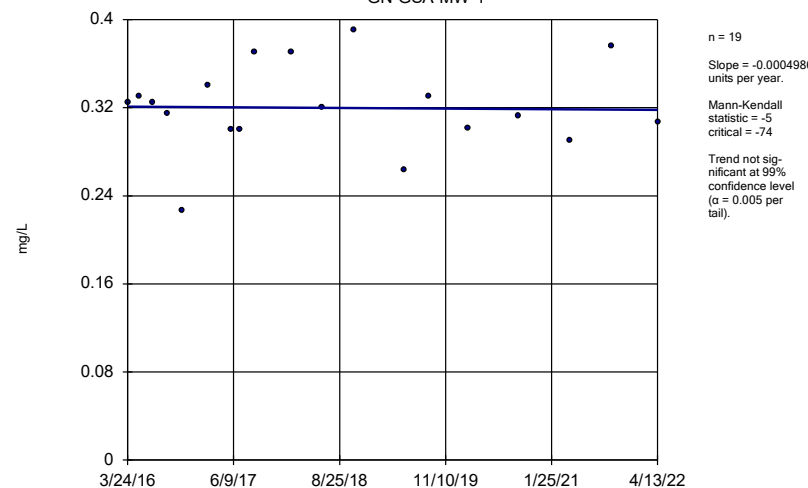
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
 GN-GSA-MW-3 (bg)



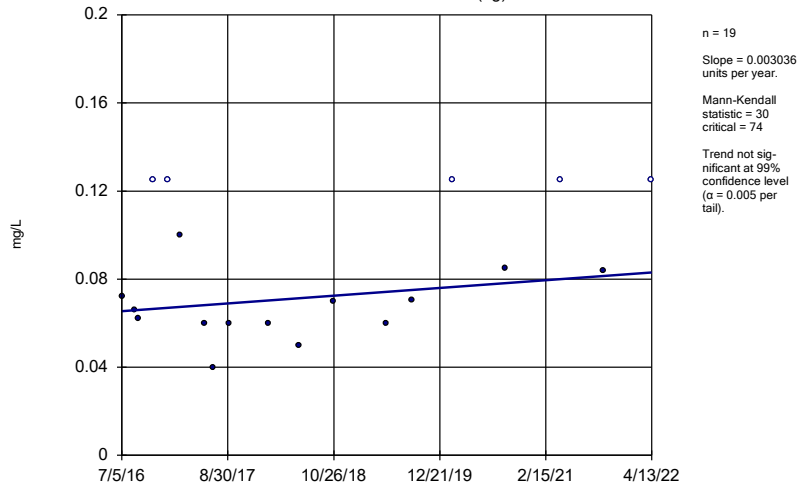
Constituent: Chloride Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
 GN-GSA-MW-1



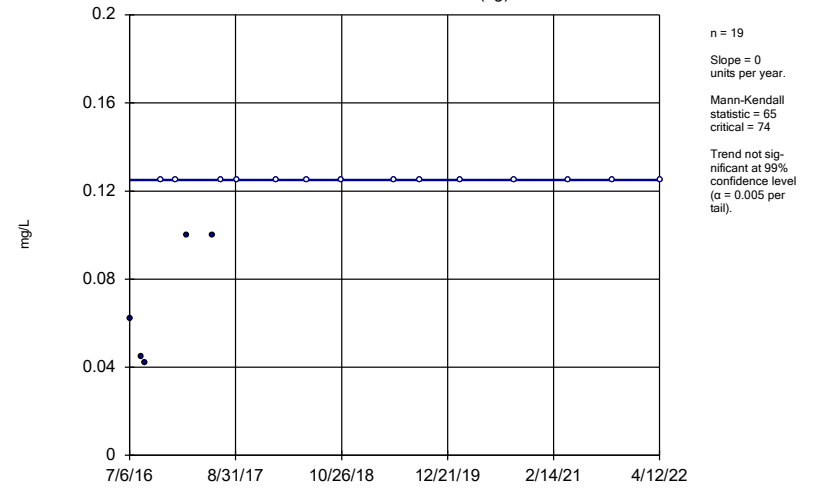
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 Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-14S (bg)



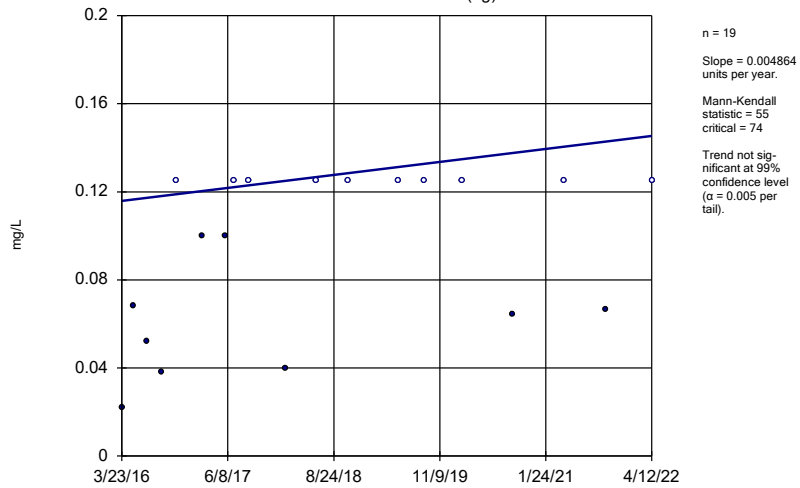
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-15 (bg)



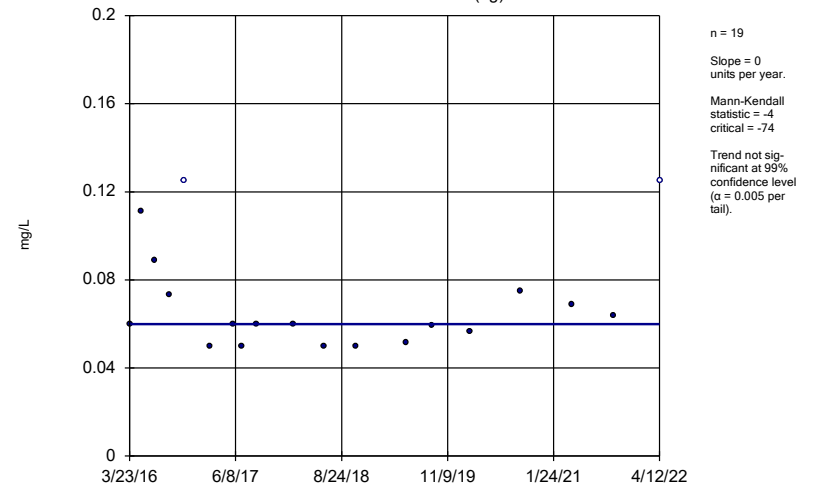
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-2 (bg)



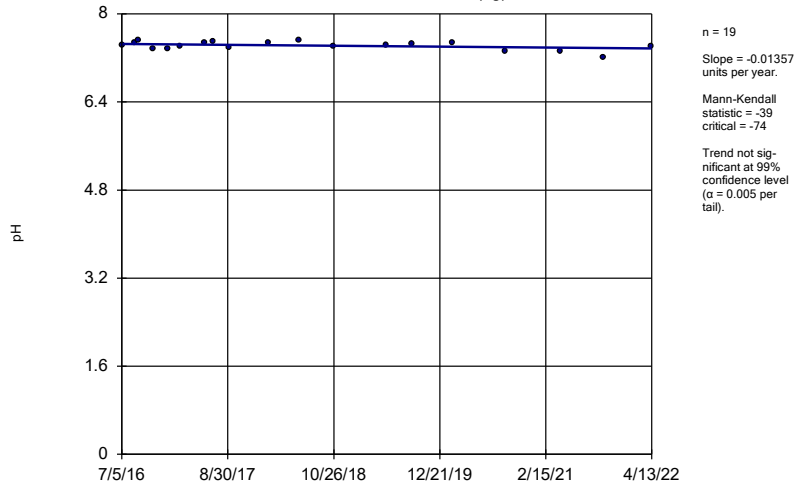
Constituent: Fluoride Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-3 (bg)



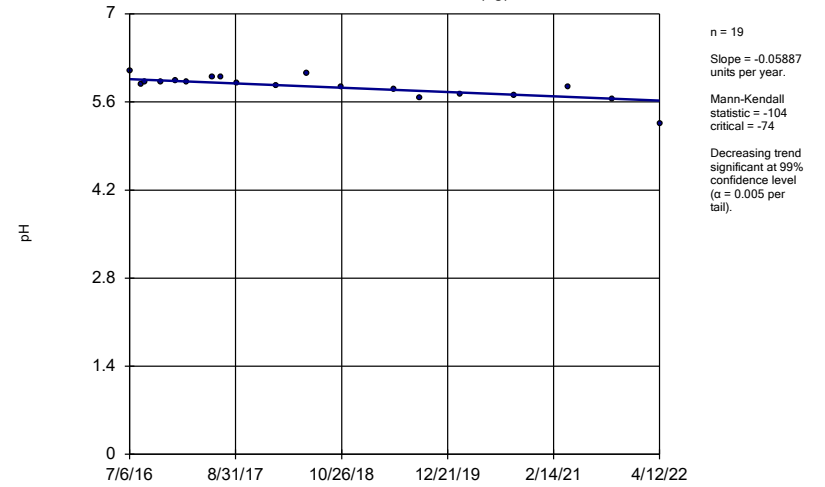
Constituent: Fluoride Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-14S (bg)



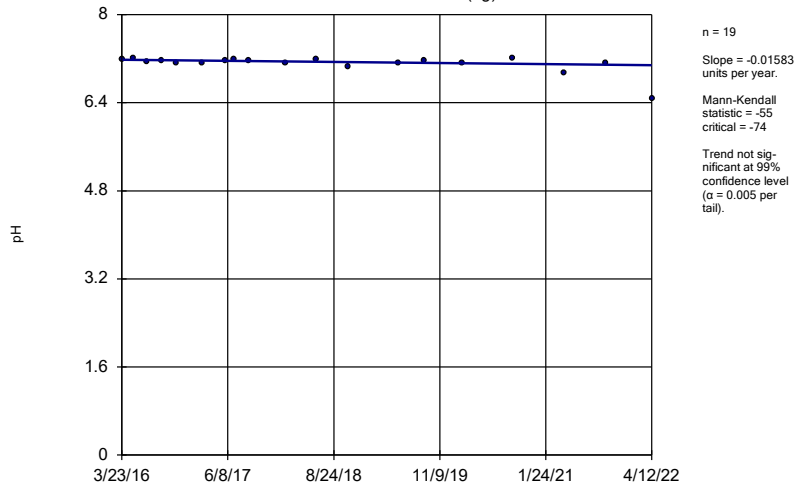
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-15 (bg)



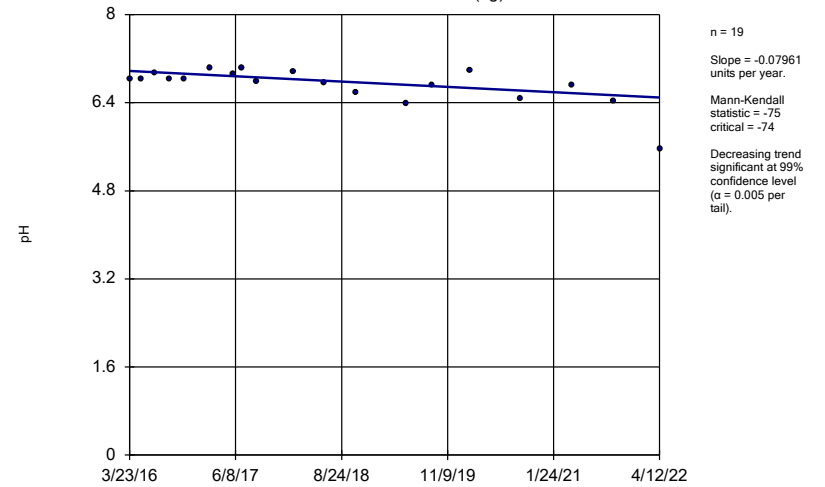
Constituent: pH Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-2 (bg)



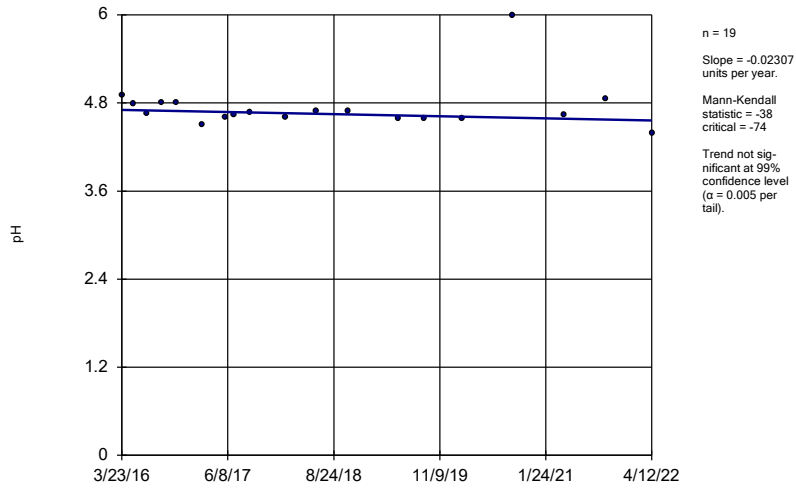
Constituent: pH Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-3 (bg)



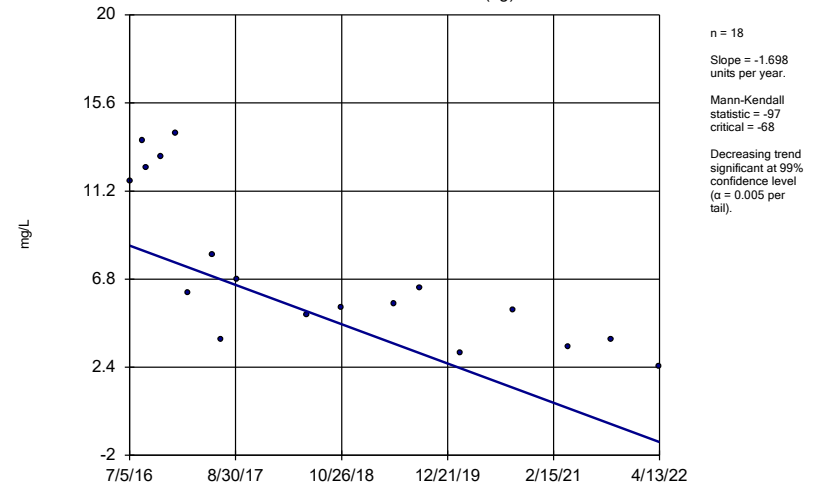
Constituent: pH Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-6



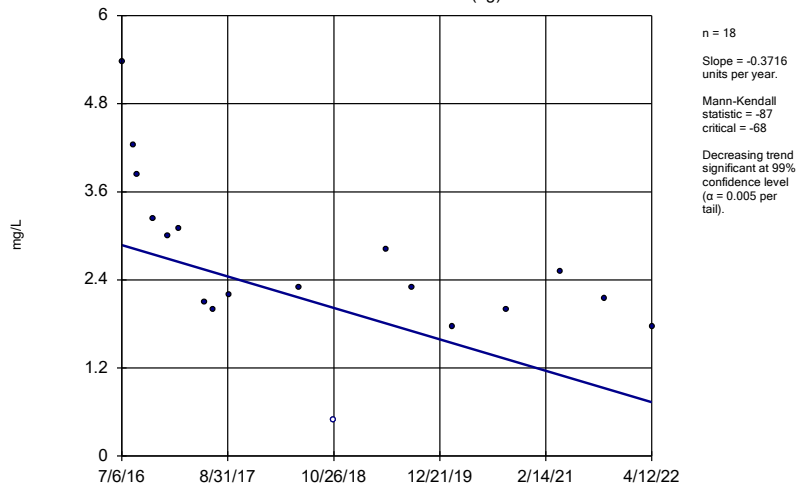
Constituent: pH Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-14S (bg)



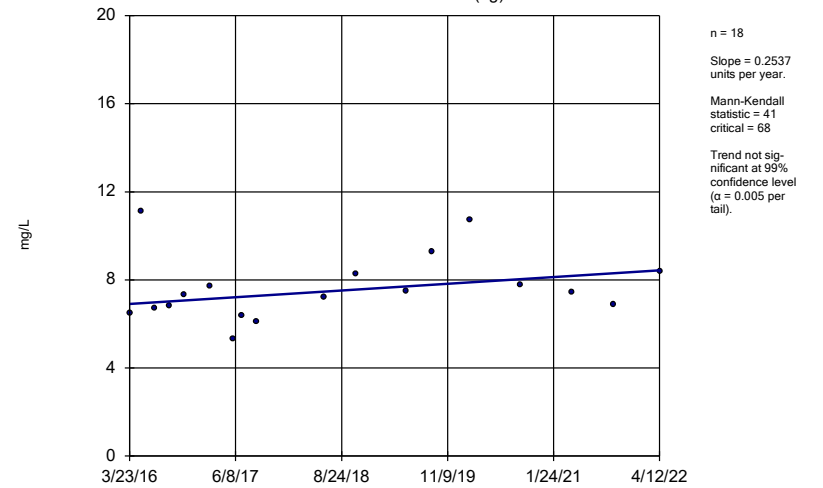
Constituent: Sulfate Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-15 (bg)



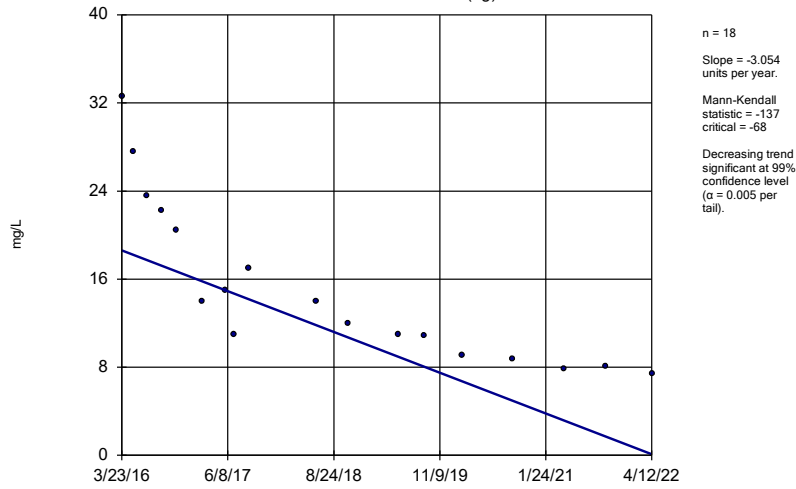
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-2 (bg)



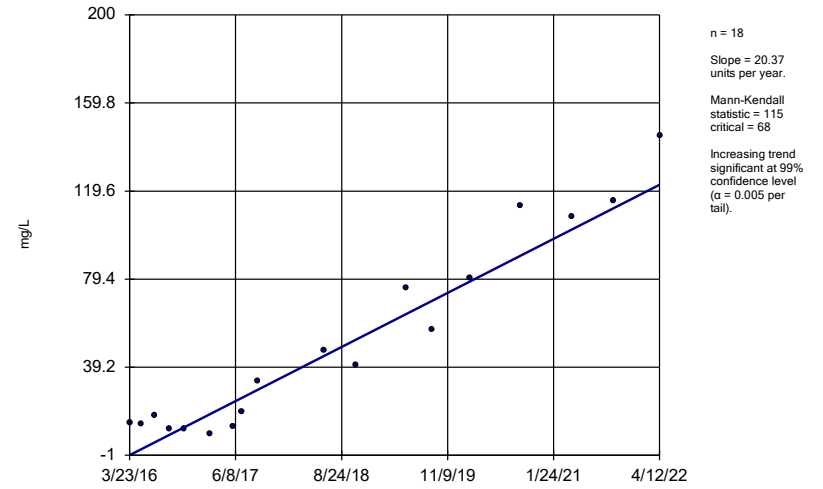
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-3 (bg)



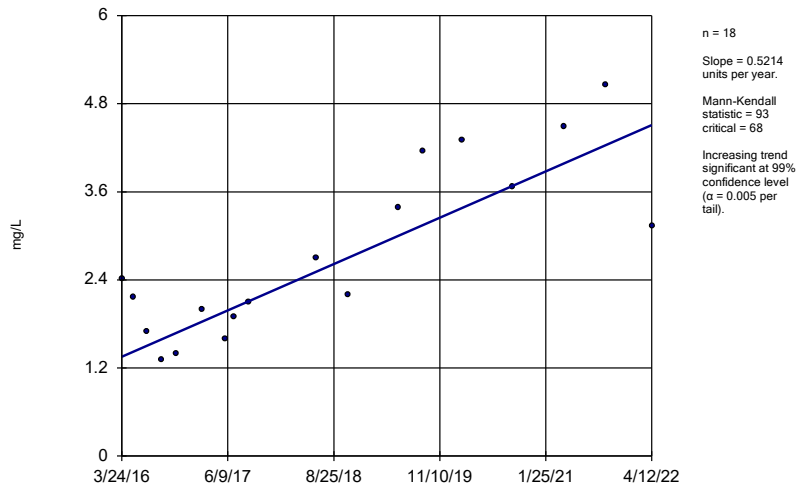
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-5



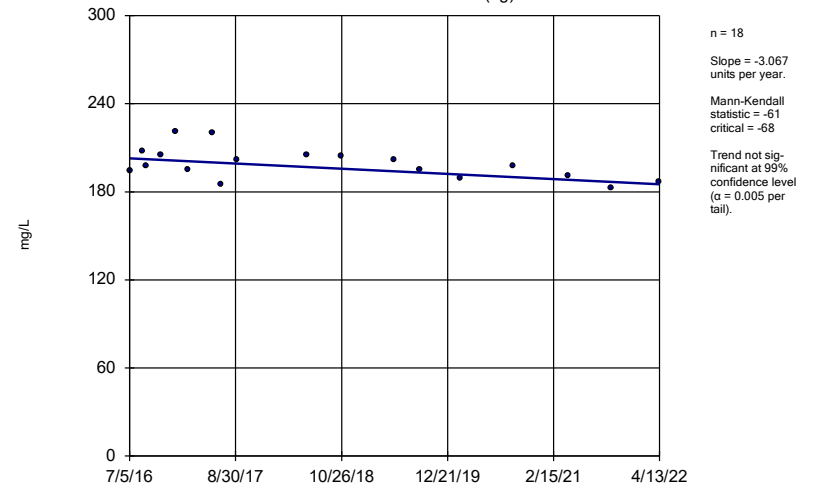
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-8



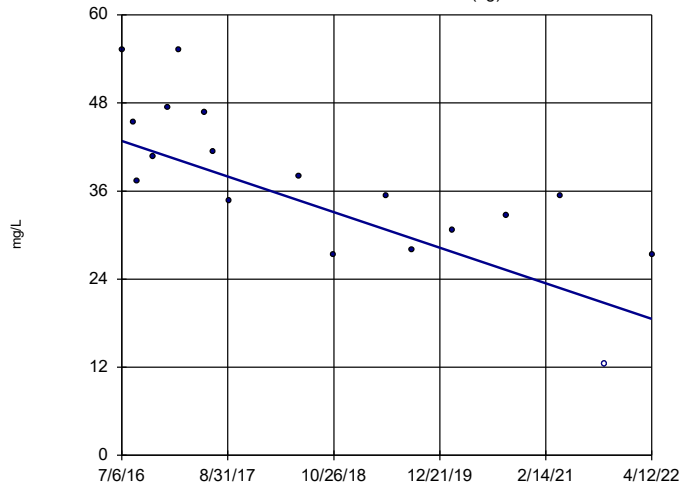
Constituent: Sulfate Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-14S (bg)



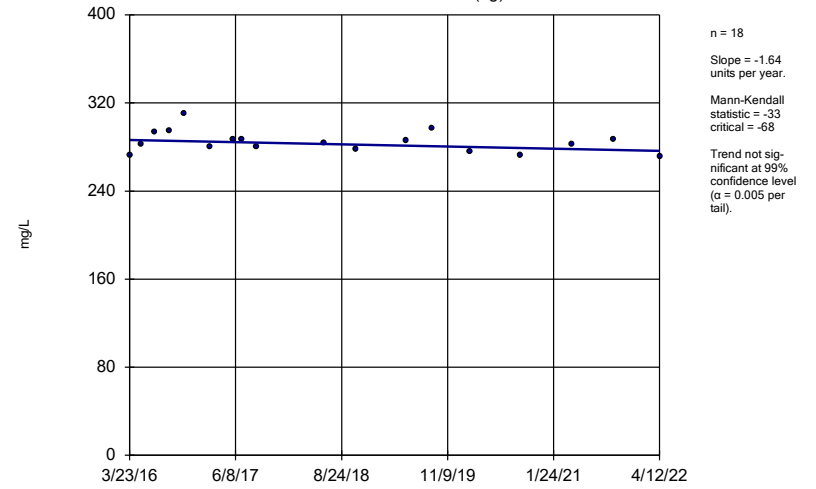
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-15 (bg)



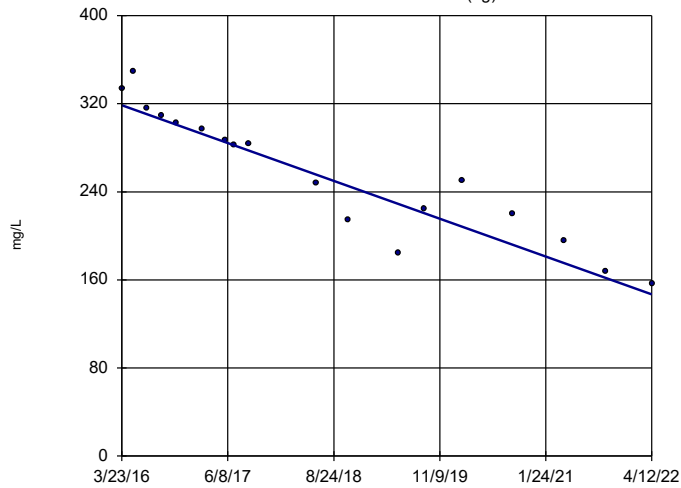
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-2 (bg)



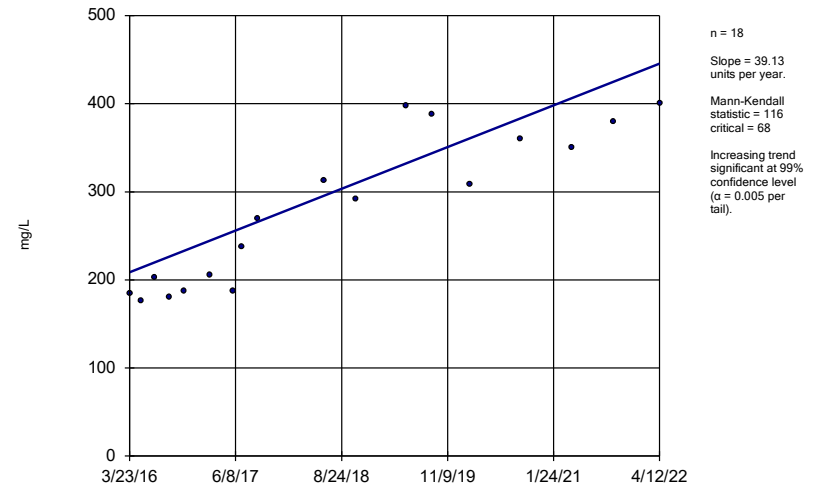
Constituent: TDS Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-3 (bg)



Constituent: TDS Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-5



Constituent: TDS Analysis Run 5/31/2022 10:08 AM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

FIGURE G.

# Upper Tolerance Limits - Summary Table

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 1/11/2022, 10:38 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq 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)	n/a	0.00117	n/a	n/a	n/a	68	n/a	n/a	95.59	n/a	n/a	0.03056	NP Inter
Arsenic (mg/L)	n/a	0.00032	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Barium (mg/L)	n/a	0.0622	n/a	n/a	n/a	68	n/a	n/a	0	n/a	n/a	0.03056	NP Inter
Beryllium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Cadmium (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Chromium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Cobalt (mg/L)	n/a	0.00313	n/a	n/a	n/a	68	n/a	n/a	94.12	n/a	n/a	0.03056	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	2.36	n/a	n/a	n/a	68	n/a	n/a	2.941	n/a	n/a	0.03056	NP Inter
Fluoride (mg/L)	n/a	0.111	n/a	n/a	n/a	72	n/a	n/a	37.5	n/a	n/a	0.02489	NP Inter
Lead (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Lithium (mg/L)	n/a	0.02	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Molybdenum (mg/L)	n/a	0.00046	n/a	n/a	n/a	68	n/a	n/a	92.65	n/a	n/a	0.03056	NP Inter
Selenium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter
Thallium (mg/L)	n/a	0.000228	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter



FIGURE H.

<b>GASTON GYPSUM POND GWPS</b>			
<b>Analyte</b>	<b>Units</b>	<b>Background</b>	<b>GWPS</b>
Antimony	mg/L	0.00117	0.006
Arsenic	mg/L	0.00032	0.01
Barium	mg/L	0.0622	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.00102	0.1
Cobalt	mg/L	0.00313	0.006
Combined Radium-226/228	pCi/L	2.36	5
Fluoride	mg/L	0.111	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00046	0.1
Selenium	mg/L	0.00102	0.05
Thallium	mg/L	0.000228	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2021.

FIGURE I.

# Confidence Intervals - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 5/31/2022, 10:18 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>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	GN-GSA-MW-1	2.585	2.002	2	Yes	8	2.294	0.275	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 5/31/2022, 10:18 AM

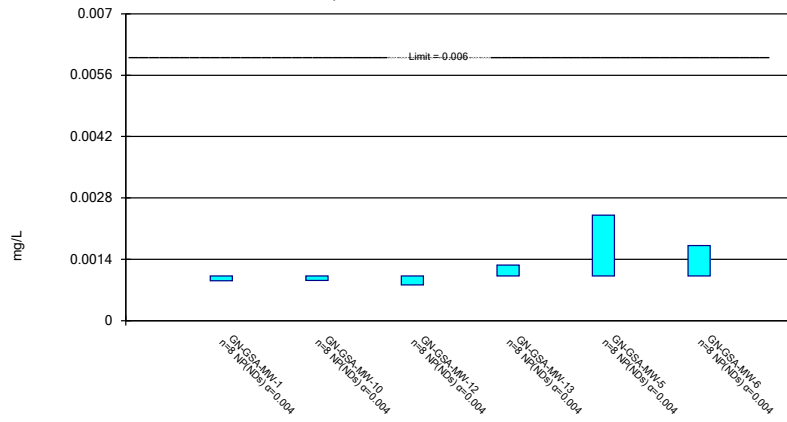
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.00102	0.000909	0.006	No	8	0.001006	0.00003924	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.00102	0.000916	0.006	No	8	0.001007	0.00003677	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.00102	0.000813	0.006	No	8	0.0009941	0.00007319	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.00127	0.00102	0.006	No	8	0.001051	0.00008839	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-5	0.00241	0.00102	0.006	No	8	0.001194	0.0004914	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.00171	0.00102	0.006	No	8	0.001106	0.000244	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.00123	0.00102	0.006	No	8	0.001046	0.00007425	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.00106	0.00102	0.006	No	8	0.001025	0.00001414	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.00112	0.00102	0.006	No	8	0.001032	0.00003536	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.007288	0.003149	0.01	No	8	0.005219	0.001953	0	None	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-10	0.0002	0.00007	0.01	No	8	0.0001696	0.00005641	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.0002	0.00009	0.01	No	8	0.0001617	0.00005318	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-12	0.00033	0.0002	0.01	No	8	0.0002212	0.00004518	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-13	0.00348	0.00012	0.01	No	8	0.0005911	0.001168	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-5	0.00235	0.0001442	0.01	No	8	0.001247	0.001112	25	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-6	0.0002	0.00008	0.01	No	8	0.0001611	0.0000543	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.001	0.0002	0.01	No	8	0.0003736	0.0002757	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-8	0.001412	0.001208	0.01	No	8	0.00131	0.00009577	0	None	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-9	0.000237	0.00014	0.01	No	8	0.0001946	0.00002709	62.5	None	No	0.004	NP (NDs)
<b>Barium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>2.585</b>	<b>2.002</b>	<b>2</b>	<b>Yes</b>	<b>8</b>	<b>2.294</b>	<b>0.275</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Barium (mg/L)	GN-GSA-MW-10	0.03934	0.03324	2	No	8	0.03629	0.002878	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.0162	0.00444	2	No	8	0.007318	0.003807	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-12	0.02502	0.01835	2	No	8	0.02169	0.003146	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.0697	0.0369	2	No	8	0.04506	0.01039	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-5	0.07437	0.04615	2	No	8	0.06026	0.01331	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-6	0.01949	0.01554	2	No	8	0.01751	0.001865	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-7	0.02285	0.01553	2	No	8	0.01919	0.003452	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-8	0.0314	0.0257	2	No	8	0.02788	0.002458	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-9	0.02639	0.02224	2	No	8	0.02431	0.001956	0	None	No	0.01	Param.
Cadmium (mg/L)	GN-GSA-MW-10	0.0002	0.00008	0.005	No	8	0.000185	0.00004243	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.00102	0.00021	0.1	No	8	0.0009187	0.0002864	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.00102	0.00023	0.1	No	8	0.0009212	0.0002793	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.00102	0.0003	0.1	No	8	0.00093	0.0002546	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-12	0.00102	0.00021	0.1	No	8	0.0008275	0.0003571	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.002	0.000518	0.1	No	8	0.0009585	0.000486	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GN-GSA-MW-5	0.00102	0.00028	0.1	No	8	0.0008362	0.0003402	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.00102	0.00022	0.1	No	8	0.0007284	0.0004026	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.00102	0.000361	0.1	No	8	0.0008801	0.0002644	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.00102	0.000291	0.1	No	8	0.0007639	0.0003542	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-9	0.00102	0.00021	0.1	No	8	0.0008257	0.0003601	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.003096	0.001659	0.006	No	8	0.002322	0.0009415	12.5	None	x^2	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-12	0.00042	0.00016	0.006	No	8	0.0002247	0.00008055	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-13	0.0002	0.0001	0.006	No	8	0.0001822	0.00003634	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.004722	0.0004226	0.006	No	8	0.002509	0.002176	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-6	0.000682	0.0002	0.006	No	8	0.000374	0.0002403	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-7	0.00217	0.0002	0.006	No	8	0.0005837	0.0006766	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-8	0.0002	0.00007	0.006	No	8	0.0001666	0.00005003	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-9	0.00041	0.0000816	0.006	No	8	0.0002114	0.00009029	75	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.78	0.925	5	No	8	1.344	0.4583	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	2.293	0.1533	5	No	8	1.181	1.637	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.773	0.07089	5	No	8	0.8594	1.096	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	1.413	0.2411	5	No	8	0.8273	0.553	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	1.643	0.2405	5	No	8	0.9734	1.222	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	1.105	0.08199	5	No	8	0.5935	0.4826	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	1.245	0.07475	5	No	8	0.6598	0.5519	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.9881	0.0946	5	No	8	0.5414	0.4215	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.8329	0.0974	5	No	8	0.4652	0.347	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	0.8409	0.1718	5	No	8	0.4904	0.3597	0	None	x^(1/3)	0.01	Param.

# Confidence Intervals - All Results

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 5/31/2022, 10:18 AM

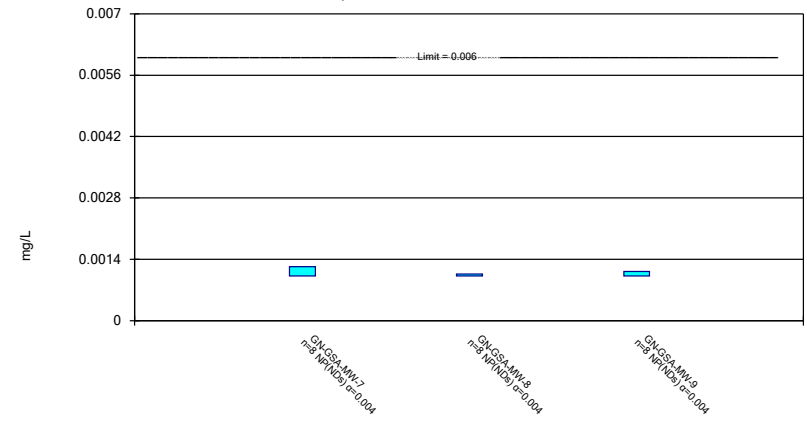
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	GN-GSA-MW-1	0.3666	0.2762	4	No	8	0.3214	0.04265	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-10	0.125	0.0617	4	No	8	0.1171	0.02238	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GN-GSA-MW-12	0.125	0.0547	4	No	8	0.08515	0.03324	37.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.125	0.05	4	No	8	0.07733	0.03031	25	None	No	0.004	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-5	0.125	0.06	4	No	8	0.1082	0.02523	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GN-GSA-MW-7	0.1223	0.07583	4	No	8	0.09906	0.02192	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1467	0.08954	4	No	8	0.1181	0.02698	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.125	0.05	4	No	8	0.08628	0.03525	37.5	None	No	0.004	NP (normality)
Lead (mg/L)	GN-GSA-MW-11	0.0002	0.00011	0.015	No	8	0.0001887	0.00003182	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.00228	0.0002	0.015	No	8	0.00046	0.0007354	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.0004	0.0002	0.015	No	8	0.0002519	0.00007709	62.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-9	0.0002	0.00011	0.015	No	8	0.0001887	0.00003182	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.02	0.00953	0.04	No	8	0.01486	0.005492	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-1	0.005371	0.003419	0.1	No	8	0.004395	0.000921	0	None	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-12	0.01	0.000298	0.1	No	8	0.006367	0.005014	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-13	0.01	0.00016	0.1	No	8	0.006318	0.005081	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-5	0.01	0.00009	0.1	No	8	0.006288	0.005123	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-7	0.01	0.00025	0.1	No	8	0.006349	0.005038	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-8	0.004113	0.003199	0.1	No	8	0.003656	0.000431	0	None	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.01	0.000207	0.1	No	8	0.006342	0.005048	62.5	None	No	0.004	NP (NDs)

Non-Parametric Confidence Interval  
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

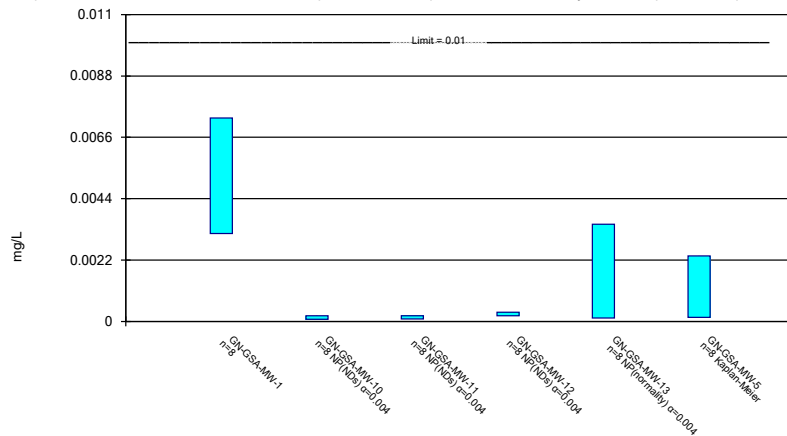
Non-Parametric Confidence Interval  
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

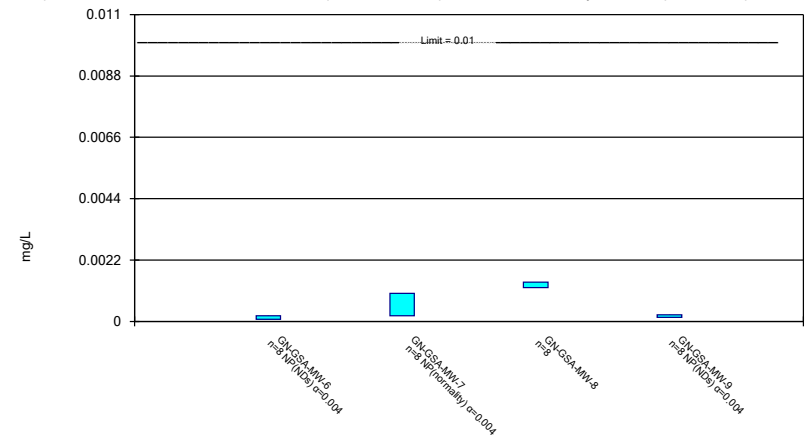
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

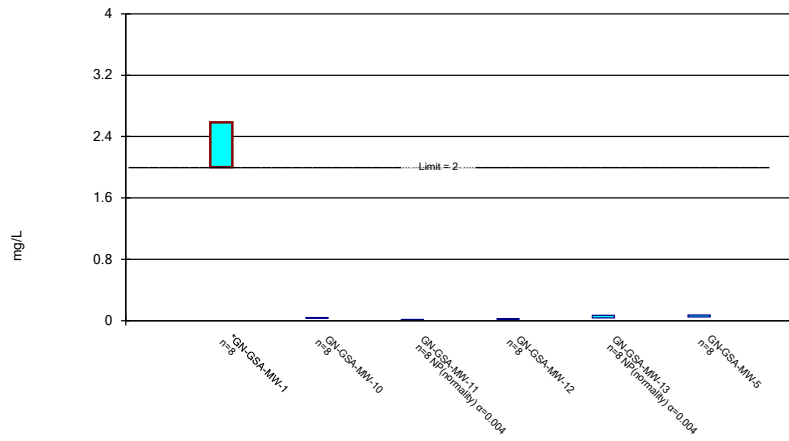
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Constituent: Arsenic Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

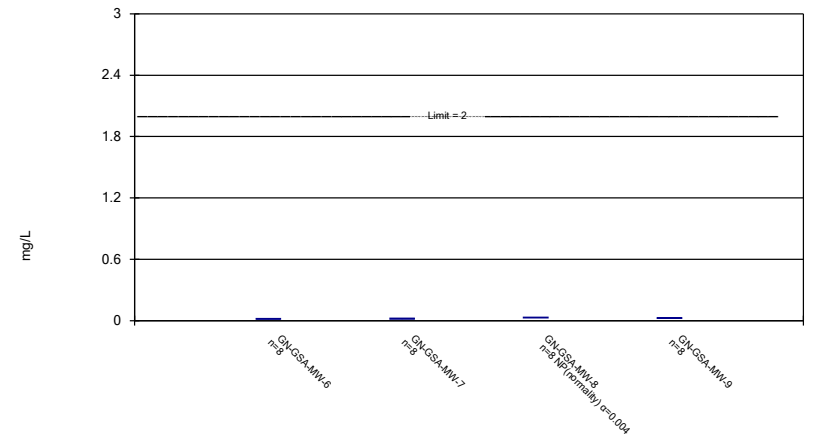
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

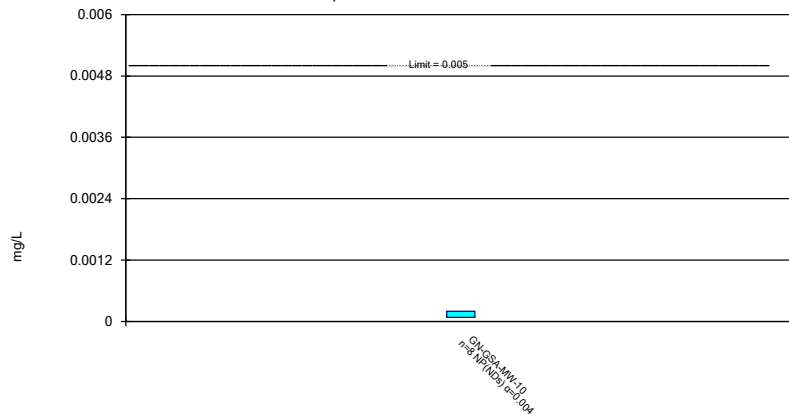
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Constituent: Barium Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

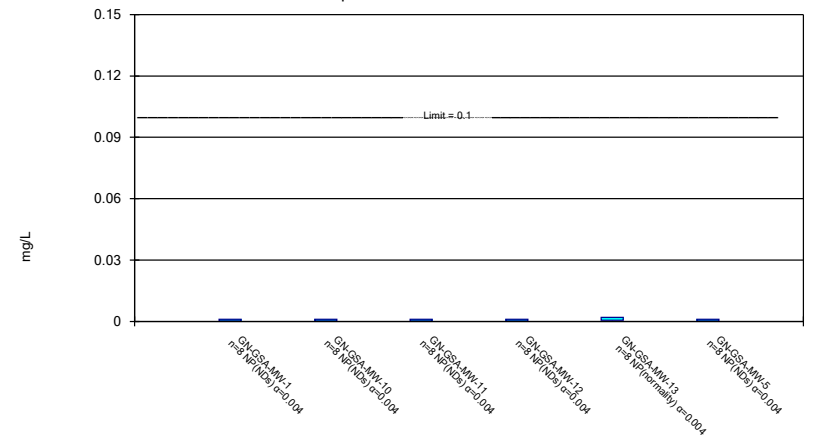
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Constituent: Cadmium Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

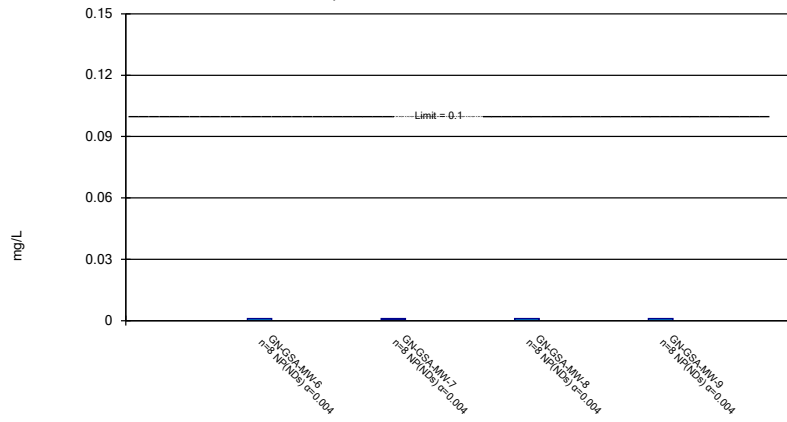


Constituent: Chromium Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA



### Non-Parametric Confidence Interval

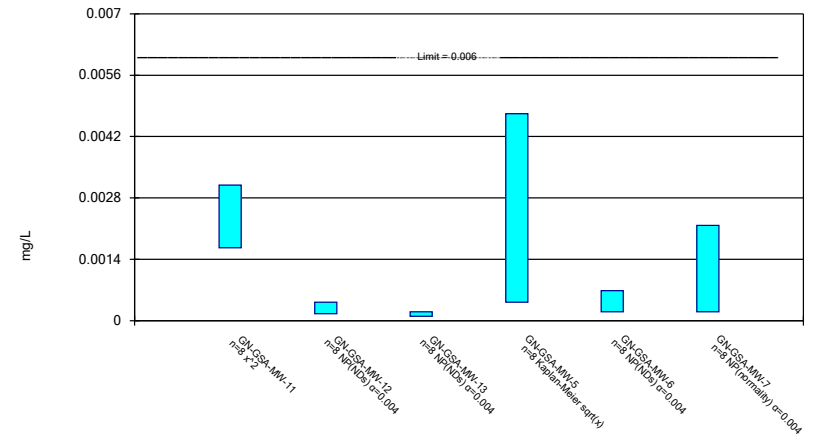
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

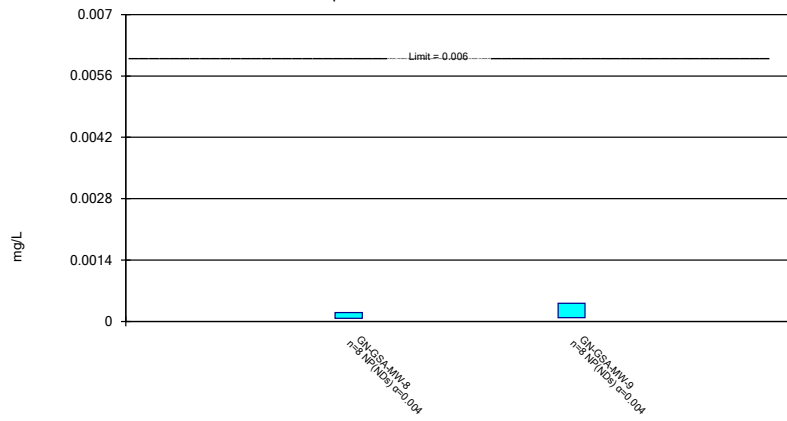
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

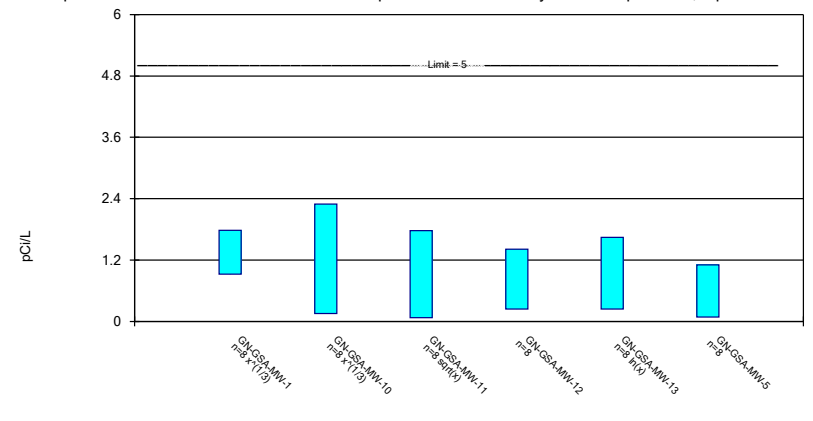
Compliance Limit is not exceeded.



Constituent: Cobalt Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric Confidence Interval

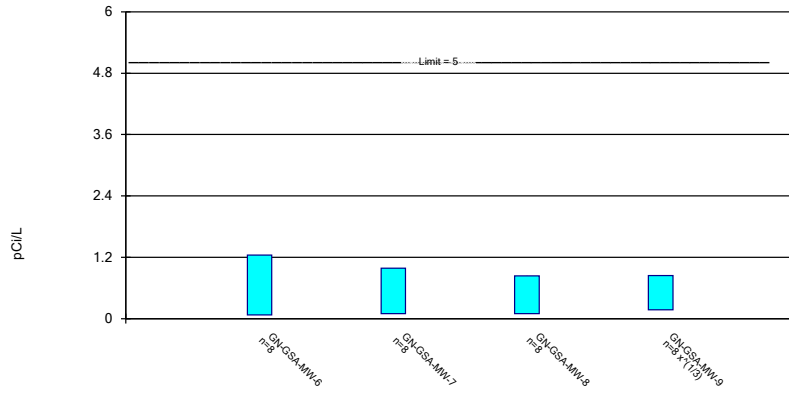
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric Confidence Interval

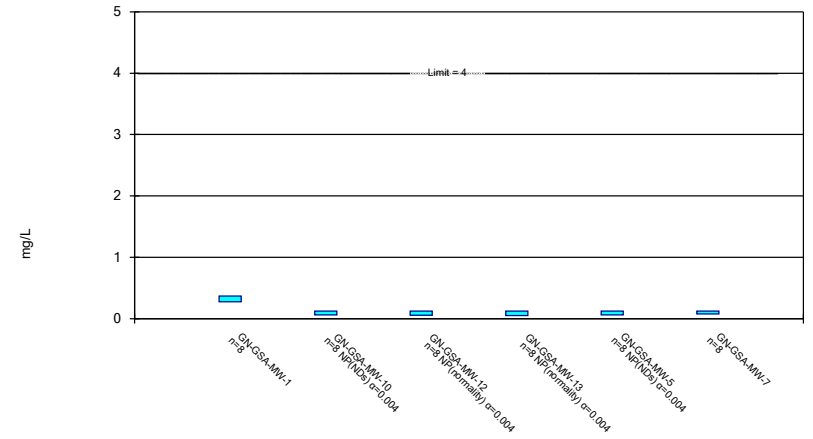
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

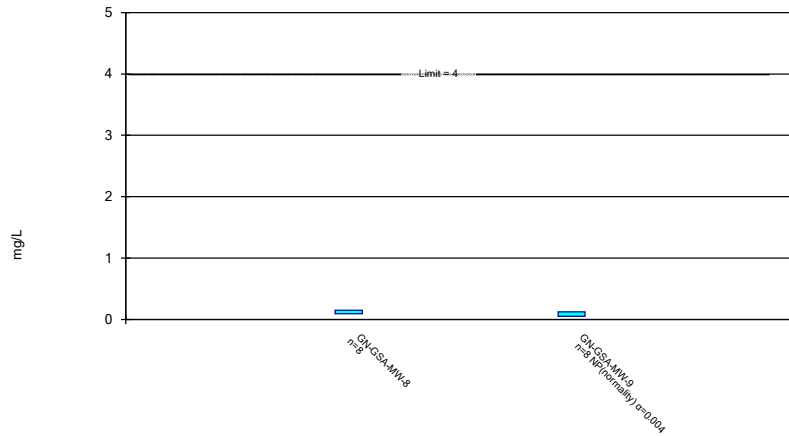
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

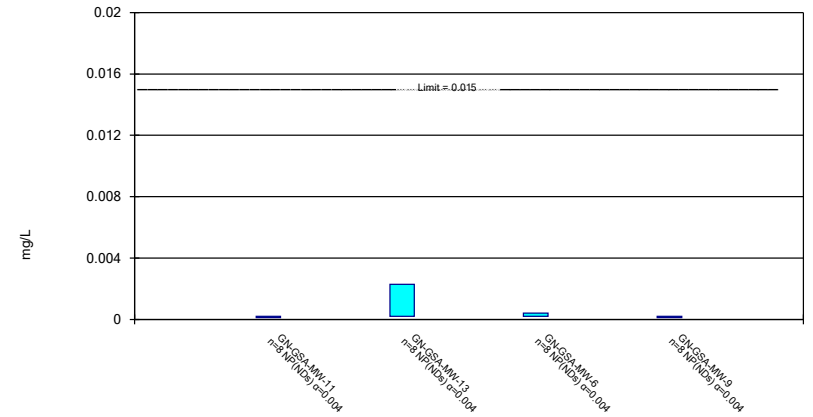
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

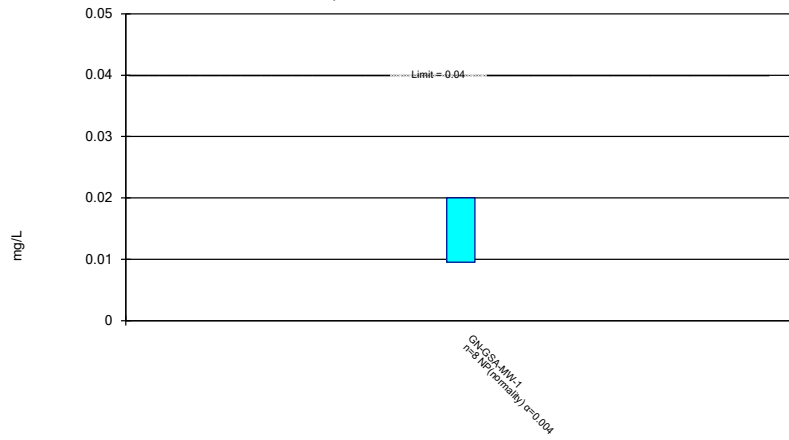
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

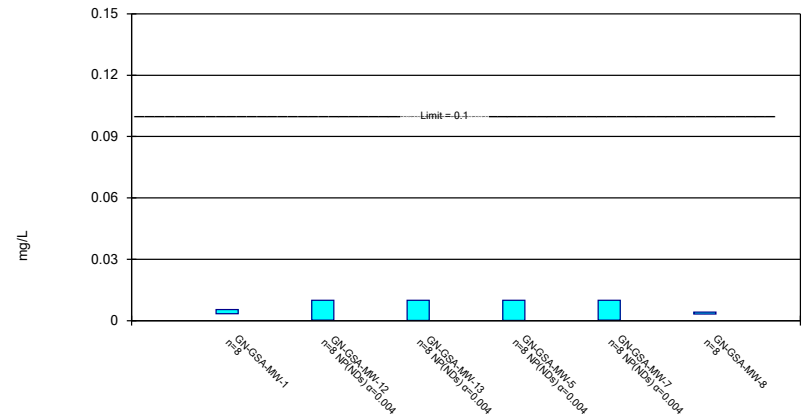
Compliance Limit is not exceeded.



Constituent: Lithium Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

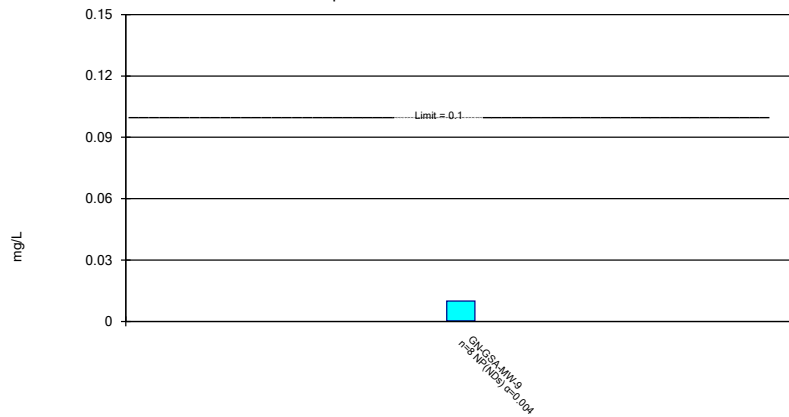
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 5/31/2022 10:17 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5	GN-GSA-MW-6
10/22/2018					<0.00102	<0.00102
10/23/2018	<0.00102		<0.00102	<0.00102		
10/24/2018		<0.00102				
5/20/2019					0.00241 (J)	0.00171 (J)
5/21/2019	0.000909 (J)	0.000916 (J)	0.000813 (J)	0.00127 (J)		
9/3/2019		<0.00102				
9/4/2019	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
2/11/2020					<0.00102	<0.00102
2/12/2020	<0.00102	<0.00102	<0.00102	<0.00102		
9/8/2020		<0.00102			<0.00102	<0.00102
9/9/2020	<0.00102		<0.00102	<0.00102		
4/13/2021	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
10/4/2021	<0.00102			<0.00102	<0.00102	<0.00102
10/5/2021		<0.00102	<0.00102			
4/12/2022					<0.00102	<0.00102
4/13/2022	<0.00102	<0.00102	<0.00102	<0.00102		
Mean	0.001006	0.001007	0.0009941	0.001051	0.001194	0.001106
Std. Dev.	3.924E-05	3.677E-05	7.319E-05	8.839E-05	0.0004914	0.000244
Upper Lim.	0.00102	0.00102	0.00102	0.00127	0.00241	0.00171
Lower Lim.	0.000909	0.000916	0.000813	0.00102	0.00102	0.00102

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
10/22/2018	<0.00102	<0.00102	<0.00102
5/20/2019	0.00123 (J)		
5/21/2019		0.00106 (J)	0.00112 (J)
9/3/2019		<0.00102	<0.00102
9/4/2019	<0.00102		
2/11/2020	<0.00102		
2/12/2020		<0.00102	<0.00102
9/8/2020			<0.00102
9/9/2020	<0.00102	<0.00102	
4/13/2021	<0.00102	<0.00102	<0.00102
10/4/2021	<0.00102	<0.00102	
10/5/2021			<0.00102
4/12/2022	<0.00102	<0.00102	<0.00102
Mean	0.001046	0.001025	0.001032
Std. Dev.	7.425E-05	1.414E-05	3.536E-05
Upper Lim.	0.00123	0.00106	0.00112
Lower Lim.	0.00102	0.00102	0.00102

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5
10/22/2018						0.00188 (J)
10/23/2018	0.00829			<0.0002	<0.0002	
10/24/2018		<0.0002	<0.0002			
5/20/2019						0.00259 (J)
5/21/2019	0.00722	<0.0002	<0.0002	<0.0002	0.00348 (J)	
9/3/2019		<0.0002	<0.0002			
9/4/2019	0.00534			<0.0002	<0.0002	0.00305 (J)
2/11/2020						<0.0002
2/12/2020	0.0062	<0.0002	<0.0002	<0.0002	<0.0002	
9/8/2020		<0.0002				<0.0002
9/9/2020	0.0046 (J)		<0.0002	<0.0002	<0.0002	
4/13/2021	0.00427	8.71E-05 (J)	9.35E-05 (J)	0.00033	0.000189 (J)	0.000587
10/4/2021	0.00335				0.00012 (J)	0.00057
10/5/2021		7E-05 (J)	0.00011 (J)	0.00023		
4/12/2022						0.0009
4/13/2022	0.00248	<0.0002	9E-05 (J)	0.00021	0.00014 (J)	
Mean	0.005219	0.0001696	0.0001617	0.0002212	0.0005911	0.001247
Std. Dev.	0.001953	5.641E-05	5.318E-05	4.518E-05	0.001168	0.001112
Upper Lim.	0.007288	0.0002	0.0002	0.00033	0.00348	0.00235
Lower Lim.	0.003149	7E-05	9E-05	0.0002	0.00012	0.0001442

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
10/22/2018	<0.0002	<0.0002	0.0015 (J)	<0.0002
5/20/2019	<0.0002	<0.0002		
5/21/2019			0.00128 (J)	<0.0002
9/3/2019			0.00118 (J)	<0.0002
9/4/2019	<0.0002	<0.0002		
2/11/2020	<0.0002	0.001 (J)		
2/12/2020			0.00133 (J)	<0.0002
9/8/2020	<0.0002			<0.0002
9/9/2020		<0.0002	0.00126 (J)	
4/13/2021	9.88E-05 (J)	0.000469	0.00134	0.000237
10/4/2021	8E-05 (J)	0.00029	0.00135	
10/5/2021				0.00014 (J)
4/12/2022	0.00011 (J)	0.00043	0.00124	0.00018 (J)
Mean	0.0001611	0.0003736	0.00131	0.0001946
Std. Dev.	5.43E-05	0.0002757	9.577E-05	2.709E-05
Upper Lim.	0.0002	0.001	0.001412	0.000237
Lower Lim.	8E-05	0.0002	0.001208	0.00014

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5
10/22/2018						0.0711
10/23/2018	2.22			0.0176	0.0457	
10/24/2018		0.0393	0.00522 (J)			
5/20/2019						0.0671
5/21/2019	2.51	0.0323	0.0056 (J)	0.0214	0.0697	
9/3/2019		0.0377	0.00656 (J)			
9/4/2019	1.96			0.0205	0.0455	0.0824
2/11/2020						0.0513
2/12/2020	2.15	0.0344	0.00444 (J)	0.024	0.0419	
9/8/2020		0.0331				0.0464
9/9/2020	2.5		0.00545 (J)	0.0182	0.039	
4/13/2021	2.41	0.0373	0.00636	0.0234	0.0403	0.0478
10/4/2021	1.92				0.0369	0.0494
10/5/2021		0.0359	0.00871	0.0212		
4/12/2022						0.0666
4/13/2022	2.68	0.0403	0.0162	0.0272	0.0415	
Mean	2.294	0.03629	0.007318	0.02169	0.04506	0.06026
Std. Dev.	0.275	0.002878	0.003807	0.003146	0.01039	0.01331
Upper Lim.	2.585	0.03934	0.0162	0.02502	0.0697	0.07437
Lower Lim.	2.002	0.03324	0.00444	0.01835	0.0369	0.04615



# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
10/22/2018	0.0185	0.0228	0.0314	0.0265
5/20/2019	0.0156	0.0163		
5/21/2019			0.0264	0.0249
9/3/2019			0.0314	0.0271
9/4/2019	0.0176	0.0256		
2/11/2020	0.0175	0.0194		
2/12/2020			0.0257	0.0214
9/8/2020	0.0159			0.0234
9/9/2020		0.0161	0.026	
4/13/2021	0.0175	0.016	0.0262	0.0226
10/4/2021	0.0161	0.0181	0.0265	
10/5/2021				0.0234
4/12/2022	0.0214	0.0192	0.0294	0.0252
Mean	0.01751	0.01919	0.02788	0.02431
Std. Dev.	0.001865	0.003452	0.002458	0.001956
Upper Lim.	0.01949	0.02285	0.0314	0.02639
Lower Lim.	0.01554	0.01553	0.0257	0.02224

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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GN-GSA-MW-10

10/24/2018	<0.0002
5/21/2019	<0.0002
9/3/2019	<0.0002
2/12/2020	<0.0002
9/8/2020	<0.0002
4/13/2021	<0.0002
10/5/2021	8E-05 (J)
4/13/2022	<0.0002
Mean	0.000185
Std. Dev.	4.243E-05
Upper Lim.	0.0002
Lower Lim.	8E-05

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5
10/22/2018						<0.00102
10/23/2018	<0.00102			<0.00102	<0.00102	
10/24/2018		<0.00102	<0.00102			
5/20/2019						<0.00102
5/21/2019	<0.00102	<0.00102	<0.00102	<0.00102	0.002 (J)	
9/3/2019		<0.00102	<0.00102			
9/4/2019	<0.00102			<0.00102	<0.00102	<0.00102
2/11/2020						<0.00102
2/12/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
9/8/2020		<0.00102				<0.00102
9/9/2020	<0.00102		<0.00102	<0.00102	<0.00102	
4/13/2021	<0.00102	<0.00102	<0.00102	<0.00102	0.000518 (J)	<0.00102
10/4/2021	0.00021 (J)				0.00055 (J)	0.00028 (J)
10/5/2021		0.00023 (J)	0.0003 (J)	0.00029 (J)		
4/12/2022						0.00029 (J)
4/13/2022	<0.00102	<0.00102	<0.00102	0.00021 (J)	0.00052 (J)	
Mean	0.0009187	0.0009212	0.00093	0.0008275	0.0009585	0.0008362
Std. Dev.	0.0002864	0.0002793	0.0002546	0.0003571	0.000486	0.0003402
Upper Lim.	0.00102	0.00102	0.00102	0.00102	0.002	0.00102
Lower Lim.	0.00021	0.00023	0.0003	0.00021	0.000518	0.00028

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
10/22/2018	<0.00102	<0.00102	<0.00102	<0.00102
5/20/2019	<0.00102	<0.00102		
5/21/2019			<0.00102	<0.00102
9/3/2019			<0.00102	<0.00102
9/4/2019	<0.00102	<0.00102		
2/11/2020	<0.00102	<0.00102		
2/12/2020			<0.00102	<0.00102
9/8/2020	<0.00102			<0.00102
9/9/2020		<0.00102	<0.00102	
4/13/2021	0.000257 (J)	0.000361 (J)	0.000291 (J)	0.000276 (J)
10/4/2021	0.00025 (J)	0.00056 (J)	0.00037 (J)	
10/5/2021				0.00021 (J)
4/12/2022	0.00022 (J)	<0.00102	0.00035 (J)	<0.00102
Mean	0.0007284	0.0008801	0.0007639	0.0008257
Std. Dev.	0.0004026	0.0002644	0.0003542	0.0003601
Upper Lim.	0.00102	0.00102	0.00102	0.00102
Lower Lim.	0.00022	0.000361	0.000291	0.00021

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7
6/12/2018			<0.0002			
10/22/2018				0.0049 (J)	<0.0002	<0.0002
10/23/2018		<0.0002	<0.0002			
10/24/2018	0.00286 (J)					
5/20/2019				0.00489 (J)	<0.0002	<0.0002
5/21/2019	0.00245 (J)	<0.0002	0.0578 (o)			
9/3/2019	0.00298 (J)					
9/4/2019		<0.0002	<0.0002	0.00527	<0.0002	0.00217 (J)
2/11/2020				<0.0002	<0.0002	<0.0002
2/12/2020	<0.0002	<0.0002	<0.0002			
9/8/2020				<0.0002	<0.0002	
9/9/2020	0.00256 (J)	<0.0002	<0.0002			<0.0002
4/13/2021	0.00212	0.000218	0.000158 (J)	0.00104	0.000682	0.00077
10/4/2021			0.0001 (J)	0.00142	0.00065	0.00033
10/5/2021	0.00217	0.00042				
4/12/2022				0.00215	0.00066	0.0006
4/13/2022	0.00324	0.00016 (J)	<0.0002			
Mean	0.002322	0.0002247	0.0001822	0.002509	0.000374	0.0005837
Std. Dev.	0.0009415	8.055E-05	3.634E-05	0.002176	0.0002403	0.0006766
Upper Lim.	0.003096	0.00042	0.0002	0.004722	0.000682	0.00217
Lower Lim.	0.001659	0.00016	0.0001	0.0004226	0.0002	0.0002

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-8	GN-GSA-MW-9
10/22/2018	<0.0002	<0.0002
5/21/2019	<0.0002	<0.0002
9/3/2019	<0.0002	<0.0002
2/12/2020	<0.0002	<0.0002
9/8/2020		<0.0002
9/9/2020	<0.0002	
4/13/2021	0.000123 (J)	8.16E-05 (J)
10/4/2021	0.00014 (J)	
10/5/2021		0.00041
4/12/2022	7E-05 (J)	<0.0002
Mean	0.0001666	0.0002114
Std. Dev.	5.003E-05	9.029E-05
Upper Lim.	0.0002	0.00041
Lower Lim.	7E-05	8.16E-05

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L)    Analysis Run 5/31/2022 10:18 AM    View: Appendix IV  
 Plant Gaston    Client: Southern Company    Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5
10/22/2018						1.16
10/23/2018	1.14			0.723	1.04	
10/24/2018		1.4	0.898			
5/20/2019						-0.251 (U)
5/21/2019	1.38	5.12 (U)	0.0995 (U)	0.376 (U)	0.503 (U)	
9/3/2019		0.793	3.47			
9/4/2019	2.39			0.534	3.92	1.05
2/11/2020						0.585
2/12/2020	1.17	0.13 (U)	0.0433 (U)	0.836	0.799	
9/8/2020		0.65 (U)				0.921
9/9/2020	1.02		0.798	1.88	0.27 (U)	
4/13/2021	0.909 (U)	0.531 (U)	0.589 (U)	0.592 (U)	0.667 (U)	0.434 (U)
10/4/2021	1.43				0.231 (U)	0.11 (U)
10/5/2021		0.269 (U)	0.524 (U)	1.42		
4/12/2022						0.739 (U)
4/13/2022	1.31	0.551 (U)	0.453 (U)	0.257 (U)	0.357 (U)	
Mean	1.344	1.181	0.8594	0.8273	0.9734	0.5935
Std. Dev.	0.4583	1.637	1.096	0.553	1.222	0.4826
Upper Lim.	1.78	2.293	1.773	1.413	1.643	1.105
Lower Lim.	0.925	0.1533	0.07089	0.2411	0.2405	0.08199

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
10/22/2018	1.07	1.03	0.748	0.21 (U)
5/20/2019	0.498	0.465		
5/21/2019			0.21 (U)	0.289 (U)
9/3/2019			0.983	0.994
9/4/2019	0.608	1.28		
2/11/2020	0.743	0.513 (U)		
2/12/2020			-0.0587 (U)	0.377 (U)
9/8/2020	-0.109 (U)			1.07
9/9/2020		0.382 (U)	0.287 (U)	
4/13/2021	0.611 (U)	0.492 (U)	0.391 (U)	0.592 (U)
10/4/2021	1.7	0.144 (U)	0.794 (U)	
10/5/2021				0.2 (U)
4/12/2022	0.157 (U)	0.0248 (U)	0.367 (U)	0.191 (U)
Mean	0.6598	0.5414	0.4652	0.4904
Std. Dev.	0.5519	0.4215	0.347	0.3597
Upper Lim.	1.245	0.9881	0.8329	0.8409
Lower Lim.	0.07475	0.0946	0.0974	0.1718



# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5	GN-GSA-MW-7
10/22/2018					0.06 (J)	0.1
10/23/2018	0.39		0.06 (J)	0.05 (J)		
10/24/2018		<0.125				
5/20/2019					0.0842 (J)	0.0919 (J)
5/21/2019	0.264	<0.125	0.0649 (J)	0.0595 (J)		
9/3/2019		<0.125				
9/4/2019	0.33		0.0547 (J)	0.0555 (J)	0.0962 (J)	0.07 (J)
2/11/2020					<0.125	0.0912 (J)
2/12/2020	0.301	<0.125	0.0586 (J)	<0.125		
9/8/2020		0.0617 (J)			<0.125	
9/9/2020	0.313		0.068 (J)	0.0655 (J)		0.118
4/13/2021	0.29	<0.125	<0.125	0.0633 (J)	<0.125	0.129
10/4/2021	0.376			0.0748 (J)	<0.125	0.12
10/5/2021		<0.125	<0.125			
4/12/2022					<0.125	0.0724 (J)
4/13/2022	0.307	<0.125	<0.125	<0.125		
Mean	0.3214	0.1171	0.08515	0.07733	0.1082	0.09906
Std. Dev.	0.04265	0.02238	0.03324	0.03031	0.02523	0.02192
Upper Lim.	0.3666	0.125	0.125	0.125	0.125	0.1223
Lower Lim.	0.2762	0.0617	0.0547	0.05	0.06	0.07583

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-8	GN-GSA-MW-9
10/22/2018	0.15	0.05 (J)
5/21/2019	0.109	0.0526 (J)
9/3/2019	0.123	0.0554 (J)
2/12/2020	0.108	<0.125
9/8/2020		0.097 (J)
9/9/2020	0.14	
4/13/2021	0.119	0.0602 (J)
10/4/2021	0.134	
10/5/2021		<0.125
4/12/2022	0.0621 (J)	<0.125
Mean	0.1181	0.08628
Std. Dev.	0.02698	0.03525
Upper Lim.	0.1467	0.125
Lower Lim.	0.08954	0.05

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-11	GN-GSA-MW-13	GN-GSA-MW-6	GN-GSA-MW-9
10/22/2018			<0.0002	<0.0002
10/23/2018		<0.0002		
10/24/2018	<0.0002			
5/20/2019			<0.0002	
5/21/2019	<0.0002	0.00228 (J)		<0.0002
9/3/2019	<0.0002			<0.0002
9/4/2019		<0.0002	<0.0002	
2/11/2020			<0.0002	
2/12/2020	<0.0002	<0.0002		<0.0002
9/8/2020			<0.0002	<0.0002
9/9/2020	<0.0002	<0.0002		
4/13/2021	<0.0002	<0.0002	0.000305	<0.0002
10/4/2021		<0.0002	0.00031	
10/5/2021	<0.0002			<0.0002
4/12/2022			0.0004	0.00011 (J)
4/13/2022	0.00011 (J)	<0.0002		
Mean	0.0001887	0.00046	0.0002519	0.0001887
Std. Dev.	3.182E-05	0.0007354	7.709E-05	3.182E-05
Upper Lim.	0.0002	0.00228	0.0004	0.0002
Lower Lim.	0.00011	0.0002	0.0002	0.00011

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-1
10/23/2018	<0.02
5/21/2019	<0.02
9/4/2019	<0.02
2/12/2020	<0.02
9/9/2020	0.0101 (J)
4/13/2021	0.00953 (J)
10/4/2021	0.00963 (J)
4/13/2022	0.00966 (J)
Mean	0.01486
Std. Dev.	0.005492
Upper Lim.	0.02
Lower Lim.	0.00953

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5	GN-GSA-MW-7	GN-GSA-MW-8
10/22/2018				<0.01	<0.01	0.00359 (J)
10/23/2018	0.006 (J)	<0.01	<0.01			
5/20/2019				<0.01	<0.01	
5/21/2019	0.00504 (J)	<0.01	<0.01			0.00379 (J)
9/3/2019						0.00437 (J)
9/4/2019	0.00504 (J)	<0.01	<0.01	<0.01	<0.01	
2/11/2020				<0.01	<0.01	
2/12/2020	0.00448 (J)	<0.01	<0.01			0.00322 (J)
9/8/2020				<0.01		
9/9/2020	0.00405 (J)	<0.01	<0.01		<0.01	0.00418 (J)
4/13/2021	0.00353	0.000298	0.000175 (J)	9.4E-05 (J)	0.000276	0.00318
10/4/2021	0.00372		0.00016 (J)	9E-05 (J)	0.00025	0.00345
10/5/2021		0.00033				
4/12/2022				0.00012 (J)	0.00027	0.00347
4/13/2022	0.0033	0.00031	0.00021			
Mean	0.004395	0.006367	0.006318	0.006288	0.006349	0.003656
Std. Dev.	0.000921	0.005014	0.005081	0.005123	0.005038	0.000431
Upper Lim.	0.005371	0.01	0.01	0.01	0.01	0.004113
Lower Lim.	0.003419	0.000298	0.00016	9E-05	0.00025	0.003199

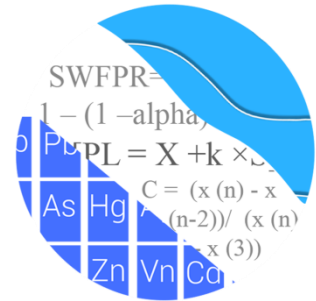
# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/31/2022 10:18 AM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-9
10/22/2018	<0.01
5/21/2019	<0.01
9/3/2019	<0.01
2/12/2020	<0.01
9/8/2020	<0.01
4/13/2021	0.000207
10/5/2021	0.00032
4/12/2022	0.00021
Mean	0.006342
Std. Dev.	0.005048
Upper Lim.	0.01
Lower Lim.	0.000207

# GROUNDWATER STATS CONSULTING



October 11, 2022

Southern Company Services  
Attn: Mr. Greg Dyer  
3535 Colonnade Parkway  
Birmingham, AL 35243

Re: Plant Gaston Gypsum Pond  
2<sup>nd</sup> Semi-Annual Statistical Analysis – August 2022

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the August 2022 2<sup>nd</sup> semi-annual sample event for Alabama Power Company's Plant Gaston Gypsum Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GN-GSA-MW-2, GN-GSA-MW-3, GN-GSA-MW-14S, and GN-GSA-MW-15
- **Downgradient wells:** GN-GSA-MW-1, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, and GN-GSA-MW-13
- **Delineation well:** GN-GSA-GS2-1 and GN-GSA-GS2-4

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The CCR program consists of the following constituents:

**Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS

**Appendix IV** (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. A substitution of the most recent reporting limit is used for non-detect data. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 9
- # Background Samples (Interwell): 76
- # Constituents: 7
- # Downgradient wells: 10



## Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for calcium, chloride, sulfate, and TDS
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, fluoride, and pH

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater

quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

### **Background Update Summary – Conducted in Fall 2021**

Intrawell prediction limits, which compare the most recent compliance sample from a given well to historical data from the same well, are updated by testing for the appropriateness of consolidating new sampling observations with the screened background data. The last background update was performed in Fall 2021. This process is described below and requires a minimum of four new data points. Historical data were evaluated for updating with newer data through April 2021 through the use of time series graphs to identify potential outliers, when necessary, as well as with the Mann Whitney test for equality of medians. As discussed in the Statistical Analysis Plan (August 2020), intrawell prediction limits are used to evaluate calcium, chloride, sulfate, and TDS at all wells due to natural spatial variation in groundwater quality for these parameters.

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event after screening for new outliers. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend. Interwell prediction limits are used to evaluate boron, fluoride, and pH.

### Outlier Analysis

Prior to performing prediction limits, proposed background data through April 2021 were reviewed through visual screening to identify any newly suspected outliers at all wells for calcium, chloride sulfate, and TDS, and through October 2021 at upgradient wells for boron, fluoride, and pH. When identified, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective.

During the background screening, two historical high values for sulfate in well GN-GSA-MW-6 were flagged as outliers. While some records contained historical concentrations of sulfate that are slightly higher than present-day concentrations, no

adjustments were required to these records due to the overall low concentrations throughout the entire record. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of flagged values follows this letter (Figure C).

### Mann-Whitney Comparison of Medians

For constituents requiring intrawell prediction limits, the Mann Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through May 2019 to compliance data through April 2021. Previously truncated records which resulted from the previous update were evaluated by comparing only the truncated portion of the data set to the more recent measurements. When the medians of the two groups are not statistically significantly different at the 99% confidence level, background data sets are updated to include the newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

#### Increase:

- Calcium: GN-GSA-MW-1, GN-GSA-MW-10, and GN-GSA-MW-13
- Chloride: GN-GSA-MW-11
- Sulfate: GN-GSA-MW-5 and GN-GSA-MW-8
- TDS: GN-GSA-MW-5 and GN-GSA-MW-10

#### Decrease:

- Calcium: GN-GSA-MW-15 (upgradient)
- Chloride: GN-GSA-MW-14S (upgradient)
- Sulfate: GN-GSA-MW-3 (upgradient)

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data unless it can be reasonably justified that the change in concentrations reflects a naturally occurring shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

While the increasing median concentrations between the background and compliance data were slightly different for calcium in downgradient wells GN-GSA-MW-1, GN-GSA-MW-10, and GN-GSA-MW-13, the majority of the reported measurements in more recent data are stable and similar to concentrations reported within each well's

respective background. Additionally, these concentrations are similar to those reported in at least one upgradient well. Therefore, these records were updated.

The statistically significant increasing differences identified at remaining downgradient wells by the Mann-Whitney test resulted from increases in median concentrations in more recent data. In order to maintain conservative (i.e., lower) statistical limits, the following well/constituent pairs were not updated during the screening:

- Calcium: GN-GSA-MW-5
- Chloride: GN-GSA-MW-11
- Sulfate: GN-GSA-MW-5 and GN-GSA-MW-8
- TDS: GN-GSA-MW-5 and GN-GSA-MW-10

Although not significant at the 99% confidence level, the increases in concentrations for calcium at well GN-GSA-MW-5 would lead to constructing statistical limits that would be difficult to detect any potential release from the facility. Therefore, the background data set for this well/constituent pair was not updated with compliance data.

The statistically significant decreasing differences identified at upgradient wells for calcium and chloride by the Mann-Whitney test resulted from slightly lower medians in more recent data compared to the medians of the historical data in these wells. These records, however, were updated since statistically significant decreases in medians between historical and compliance data sets signify lower concentrations and, subsequently, more conservative (i.e., lower) statistical limits. For sulfate in upgradient well GN-GSA-MW-3, however, more recent observations have stabilized at lower concentrations; therefore, the earlier portion of the record prior to February 2017 with higher concentrations was truncated to construct statistical limits that represent present-day groundwater quality. A list of well/constituent pairs using a truncated portion of their records follows this letter.

All records will be re-evaluated during the next background update. If future concentrations are similar to those observed currently, the earlier portion of the records may require deselection so only more recent data are used to construct statistical limits which are reflective of present-day water quality conditions. If, however, concentrations return to historical lower levels, more recent higher measurements may be flagged as outliers and deselected prior to construction of statistical limits

## Trend Analysis – Upgradient Wells

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. No statistically significant trends were identified except for a statistically significant decreasing trend for pH in upgradient well GN-GSA-MW-15. Since the magnitude of the trend is marginal compared to the concentrations, no adjustments were required. A summary of these results was submitted with the Fall 2021 report.

## **Evaluation of Appendix III Parameters – August 2022**

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Background data are re-evaluated when a minimum of 4 compliance samples are available.

Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

## Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for calcium, chloride, sulfate, and TDS using screened background data through April 2021 at each well (Figure D). The August 2022 sample at each well is compared to its respective intrawell prediction limit. A list of well/constituent pairs that use a truncated portion of their background data sets follow this report. A summary of previously flagged outliers follows this report.

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, fluoride, and pH using upgradient well data through August 2022 (Figure E).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter (pages 15-18). Exceedances for both interwell and intrawell prediction limits were identified for the following well/constituent pairs:

Intrawell:

- Calcium: GN-GSA-MW-1, GN-GSA-MW-2 (upgradient), GN-GSA-MW-5, GN-GSA-MW-7, GN-GSA-MW-9, GN-GSA-10 and GN-GSA-MW-12
- Chloride: GN-GSA-MW-11
- Sulfate: GN-GSA-MW-5 and GN-GSA-MW-8
- TDS: GN-GSA-MW-5

Interwell:

- Fluoride: GN-GSA-MW-1
- pH: GN-GSA-MW-6

Trend Tests

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure F). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site, which represents natural variation in groundwater quality. A summary of the trend test results follows this letter (pages 19-20). Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

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

Decreasing:

- Calcium: GN-GSA-MW-3 and GN-GSA-MW-15 (both upgradient)
- Chloride: GN-GSA-MW-14S and GN-GSA-MW-15 (both upgradient)
- pH: GN-GSA-MW-3 and GN-GSA-MW-15 (both upgradient)
- Sulfate: GN-GSA-MW-3, GN-GSA-MW-14S, and GN-GSA-MW-15 (all upgradient)
- TDS: GN-GSA-MW-3, GN-GSA-MW-14S, and GN-GSA-MW-15 (all upgradient)

## **Evaluation of Appendix IV Parameters – August 2022**

Data from all wells for Appendix IV parameters were reassessed for outliers during previous analyses. A summary of previously flagged outliers follows this report.

In accordance with Alabama Department of Environmental Management (ADEM), the Groundwater Protections Standards (GWPS) were updated during the 2021 2<sup>nd</sup> semi-annual statistical analysis. The GWPS will be updated again during the 2023 2<sup>nd</sup> semi-annual statistical analysis. The methodology used to create these GWPS is described below.

### Interwell Upper Tolerance Limits

First, background limits were determined using upper tolerance limits (UTLs) constructed from pooled upgradient well data through October 2021 (Figure G). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed. A summary of the upper tolerance limits follows this letter (page 21).

### Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure H, page 22) in the confidence interval comparisons described below.

## Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through August 2022 for each of the Appendix IV parameters (Figure I). These intervals were either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits with 8 samples, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects.

As mentioned above, well/constituent pairs containing 100% non-detects for the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of deselected well/constituent pairs follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter (pages 23-25). No confidence interval exceedances were noted except for barium in well GN-GSA-MW-1. Note that when the lower confidence limit (LCL) uses the same number of significant digits as the GWPS, that the LCL and GWPS for barium at well GN-GSA-MW-1 are equal.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gaston Gypsum Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



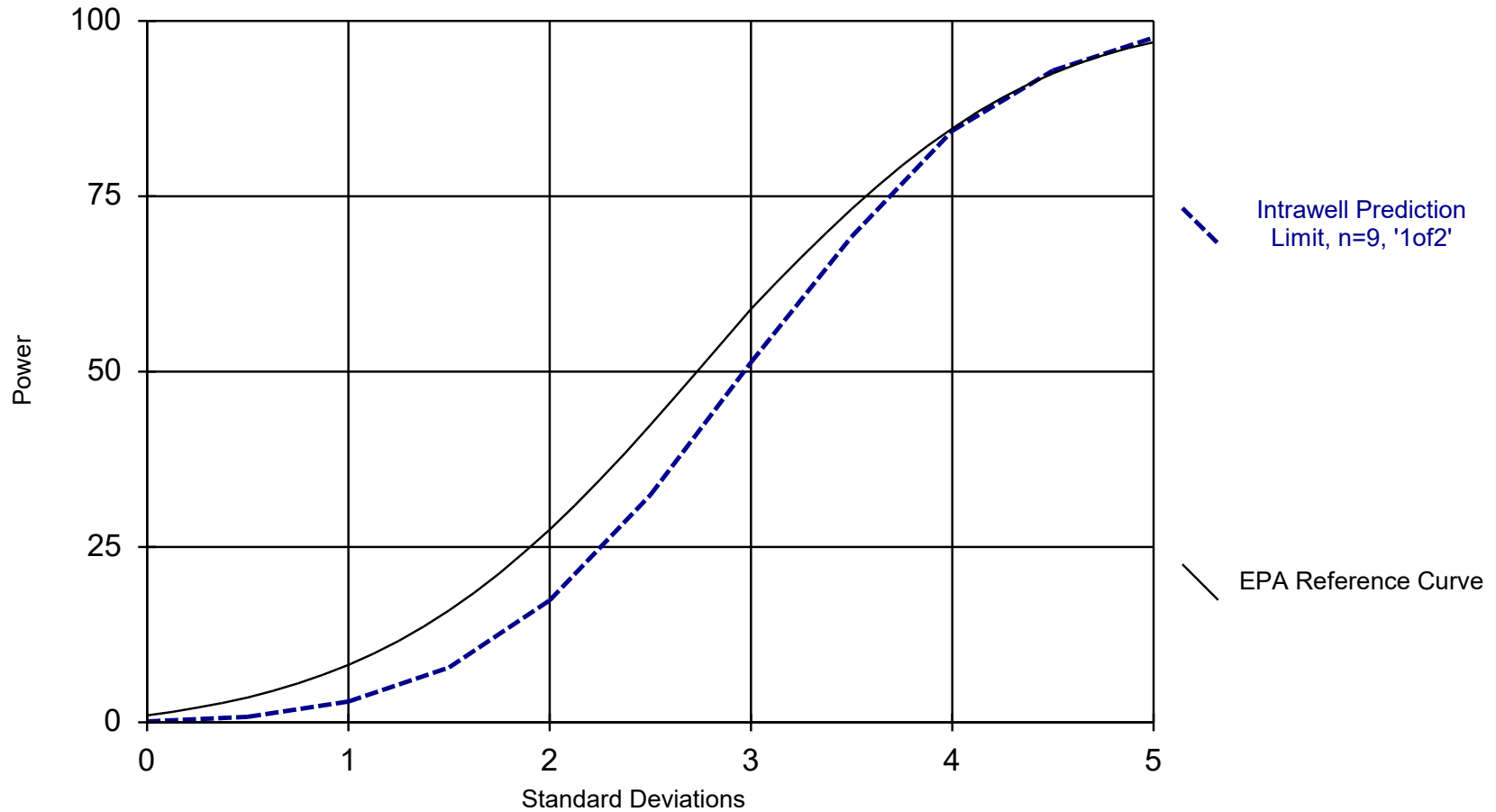
Andrew Collins  
Project Manager



Kristina Rayner  
Senior Statistician



### Intrawell Power Curve

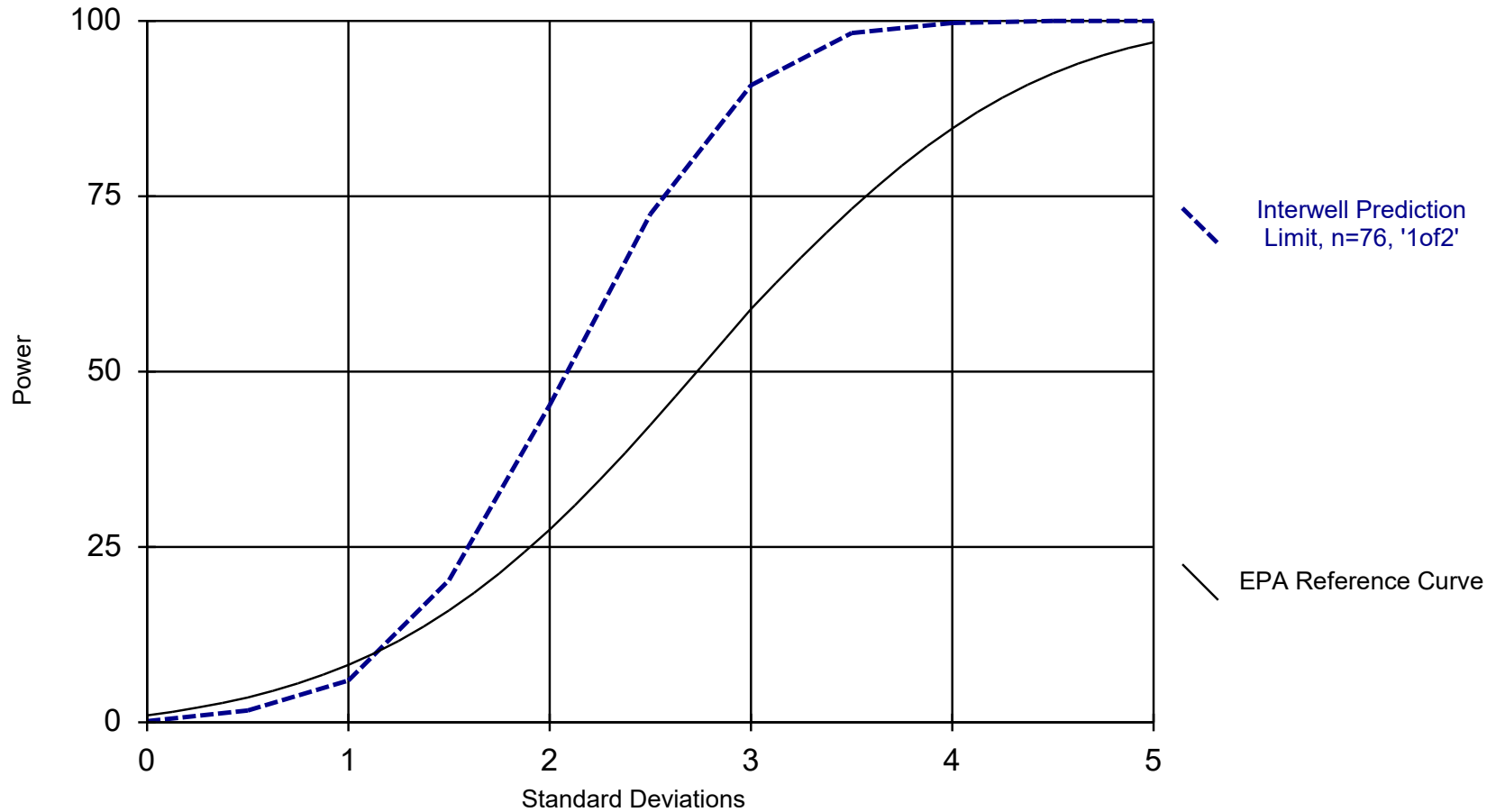


Kappa = 2.961, based on 10 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

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Plant Gaston Client: Southern Company Data: Gaston GSA

## Interwell Power Curve



Kappa = 1.989, based on 10 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 10/3/2022 4:25 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

# 100% Non-Detects: Appendix IV Downgradient

Analysis Run 10/3/2022 3:56 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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Antimony (mg/L)

GN-GSA-MW-11

Beryllium (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Cadmium (mg/L)

GN-GSA-MW-1, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Cobalt (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10

Fluoride (mg/L)

GN-GSA-MW-11, GN-GSA-MW-6

Lead (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-12, GN-GSA-MW-5, GN-GSA-MW-7, GN-GSA-MW-8

Lithium (mg/L)

GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Mercury (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Molybdenum (mg/L)

GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-6

Selenium (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

Thallium (mg/L)

GN-GSA-MW-1, GN-GSA-MW-10, GN-GSA-MW-11, GN-GSA-MW-12, GN-GSA-MW-13, GN-GSA-MW-5, GN-GSA-MW-6, GN-GSA-MW-7, GN-GSA-MW-8, GN-GSA-MW-9

# Date Ranges

Date: 10/3/2022 2:52 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

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Calcium (mg/L)

GN-GSA-MW-5 background:3/23/2016-5/20/2019

Chloride (mg/L)

GN-GSA-MW-11 background:3/23/2016-9/7/2017

Sulfate (mg/L)

GN-GSA-MW-3 background:2/20/2017-4/13/2021

GN-GSA-MW-5 background:3/23/2016-9/7/2017

GN-GSA-MW-8 background:3/23/2016-9/7/2017

TDS (mg/L)

GN-GSA-MW-10 background:3/23/2016-9/7/2017

GN-GSA-MW-5 background:3/23/2016-9/7/2017

# Appendix III Intrawell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 2:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-1	49.39	n/a	8/18/2022	53.5	Yes	16	39.03	4.343	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-10	108.2	n/a	8/17/2022	118	Yes	16	95.87	5.157	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-12	85.67	n/a	8/18/2022	110	Yes	16	69.87	6.624	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-2	96.06	n/a	8/16/2022	96.3	Yes	16	81.49	6.104	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-5	71.16	n/a	8/16/2022	94.8	Yes	12	54.73	6.323	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-7	76.85	n/a	8/16/2022	82.2	Yes	16	65.81	4.63	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-9	67.34	n/a	8/17/2022	67.7	Yes	16	50.56	7.034	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-11	7.709	n/a	8/17/2022	19.5	Yes	9	4.269	1.162	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-5	37.06	n/a	8/16/2022	142	Yes	9	15.51	7.278	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-8	2.935	n/a	8/16/2022	5.27	Yes	9	1.843	0.3686	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-5	295.1	n/a	8/16/2022	376	Yes	9	203.3	30.98	0	None	No	0.0007523	Param Intra 1 of 2

# Appendix III Intrawell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 2:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>49.39</b>	n/a	<b>8/18/2022</b>	<b>53.5</b>	<b>Yes 16</b>	<b>39.03</b>	<b>4.343</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-10</b>	<b>108.2</b>	n/a	<b>8/17/2022</b>	<b>118</b>	<b>Yes 16</b>	<b>95.87</b>	<b>5.157</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-11	15.67	n/a	8/17/2022	12.6	No 16	10.74	2.063	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>85.67</b>	n/a	<b>8/18/2022</b>	<b>110</b>	<b>Yes 16</b>	<b>69.87</b>	<b>6.624</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-13	109.8	n/a	8/16/2022	107	No 16	88.63	8.857	0	None	No	0.0007523	Param Intra 1 of 2	
Calcium (mg/L)	GN-GSA-MW-14S	57.44	n/a	8/16/2022	52.1	No 16	48.82	3.611	0	None	No	0.0007523	Param Intra 1 of 2	
Calcium (mg/L)	GN-GSA-MW-15	11.1	n/a	8/16/2022	4.13	No 16	7.273	1.606	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-2</b>	<b>96.06</b>	n/a	<b>8/16/2022</b>	<b>96.3</b>	<b>Yes 16</b>	<b>81.49</b>	<b>6.104</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-3	125.5	n/a	8/16/2022	50.5	No 16	84.59	17.13	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>71.16</b>	n/a	<b>8/16/2022</b>	<b>94.8</b>	<b>Yes 12</b>	<b>54.73</b>	<b>6.323</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-6	1.491	n/a	8/16/2022	0.516	No 16	0.867	0.2613	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-7</b>	<b>76.85</b>	n/a	<b>8/16/2022</b>	<b>82.2</b>	<b>Yes 16</b>	<b>65.81</b>	<b>4.63</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-8	61.1	n/a	8/16/2022	58.4	No 16	55.91	2.177	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-9</b>	<b>67.34</b>	n/a	<b>8/17/2022</b>	<b>67.7</b>	<b>Yes 16</b>	<b>50.56</b>	<b>7.034</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Chloride (mg/L)	GN-GSA-MW-1	3.72	n/a	8/18/2022	2.3	No 16	2.492	0.5148	6.25	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-10	3.733	n/a	8/17/2022	3.11	No 16	7.867	2.545	6.25	None	x^2	0.0007523	Param Intra 1 of 2	
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>7.709</b>	n/a	<b>8/17/2022</b>	<b>19.5</b>	<b>Yes 9</b>	<b>4.269</b>	<b>1.162</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Chloride (mg/L)	GN-GSA-MW-12	5.443	n/a	8/18/2022	3.53	No 16	3.16	0.9566	6.25	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-13	4.799	n/a	8/16/2022	3.47	No 16	3.594	0.5051	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-14S	5.899	n/a	8/16/2022	2.54	No 16	3.731	0.9087	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-15	4.314	n/a	8/16/2022	2.27	No 16	2.366	0.8163	6.25	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-2	4.633	n/a	8/16/2022	3.66	No 16	3.649	0.4125	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-3	3.779	n/a	8/16/2022	3.08	No 16	2.981	0.3341	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-5	21.16	n/a	8/16/2022	9.72	No 16	10.05	4.656	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-6	4.019	n/a	8/16/2022	3.64	No 16	9.249	2.894	6.25	None	x^2	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-7	4.585	n/a	8/16/2022	3.8	No 16	3.546	0.4352	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-8	2.505	n/a	8/16/2022	1.69	No 16	1.679	0.3463	12.5	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-9	3.098	n/a	8/17/2022	2.13	No 16	5.326	1.791	6.25	None	x^2	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-1	6.359	n/a	8/18/2022	4.84	No 16	4.188	0.9103	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-10	2.255	n/a	8/17/2022	2.24	No 16	4.979	2.722	12.5	None	x^3	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-11	14.58	n/a	8/17/2022	2.29	No 16	2.28	0.6446	0	None	sqrt(x)	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-12	16.13	n/a	8/18/2022	6.66	No 16	8.719	3.106	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-13	10.31	n/a	8/16/2022	8.54	No 16	8.234	0.871	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-14S	16.97	n/a	8/16/2022	4.71	No 16	7.728	3.872	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-15	5.392	n/a	8/16/2022	3.73	No 16	2.705	1.126	6.25	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-2	11.38	n/a	8/16/2022	8.31	No 16	7.632	1.57	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-3	19.53	n/a	8/16/2022	7.79	No 11	11.88	2.842	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>37.06</b>	n/a	<b>8/16/2022</b>	<b>142</b>	<b>Yes 9</b>	<b>15.51</b>	<b>7.278</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Sulfate (mg/L)	GN-GSA-MW-6	1.89	n/a	8/16/2022	0.5ND	No 14	n/a	n/a	64.29	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-7	14.59	n/a	8/16/2022	6.63	No 16	9.522	2.123	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>2.935</b>	n/a	<b>8/16/2022</b>	<b>5.27</b>	<b>Yes 9</b>	<b>1.843</b>	<b>0.3686</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Sulfate (mg/L)	GN-GSA-MW-9	6.776	n/a	8/17/2022	4.58	No 16	5.406	0.5742	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-1	259.7	n/a	8/18/2022	214	No 16	207.7	21.8	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-10	274	n/a	8/17/2022	265	No 9	251.8	7.496	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-11	105.2	n/a	8/17/2022	76	No 16	70.39	14.61	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-12	281.5	n/a	8/18/2022	252	No 16	226.9	22.87	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-13	317.1	n/a	8/16/2022	264	No 16	1.9e7	5203459	0	None	x^3	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-14S	224.5	n/a	8/16/2022	162	No 16	200.8	9.97	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-15	60.07	n/a	8/16/2022	27.3	No 16	39.45	8.643	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-2	309	n/a	8/16/2022	280	No 16	285.3	9.95	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-3	388.2	n/a	8/16/2022	164	No 16	268.7	50.11	0	None	No	0.0007523	Param Intra 1 of 2	
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>295.1</b>	n/a	<b>8/16/2022</b>	<b>376</b>	<b>Yes 9</b>	<b>203.3</b>	<b>30.98</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
TDS (mg/L)	GN-GSA-MW-6	30	n/a	8/16/2022	12.5ND	No 16	n/a	n/a	68.75	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2	
TDS (mg/L)	GN-GSA-MW-7	256.7	n/a	8/16/2022	212	No 16	220.7	15.11	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-8	202.5	n/a	8/16/2022	162	No 16	188.9	5.691	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-9	212	n/a	8/17/2022	179	No 16	170.2	17.53	0	None	No	0.0007523	Param Intra 1 of 2	

# Appendix III Interwell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GN-GSA-MW-1	0.125	n/a	8/18/2022	0.327	Yes	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-6	7.53	5.25	8/16/2022	4.58	Yes	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2

# Appendix III Interwell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GN-GSA-MW-1	0.1015	n/a	8/18/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-10	0.1015	n/a	8/17/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-11	0.1015	n/a	8/17/2022	0.0528J	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-12	0.1015	n/a	8/18/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-13	0.1015	n/a	8/16/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-5	0.1015	n/a	8/16/2022	0.0379J	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-6	0.1015	n/a	8/16/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-7	0.1015	n/a	8/16/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-8	0.1015	n/a	8/16/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-9	0.1015	n/a	8/17/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>0.125</b>	<b>n/a</b>	<b>8/18/2022</b>	<b>0.327</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>42.5</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002971</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	GN-GSA-MW-10	0.125	n/a	8/17/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-11	0.125	n/a	8/17/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-12	0.125	n/a	8/18/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-13	0.125	n/a	8/16/2022	0.0614J	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-5	0.125	n/a	8/16/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-6	0.125	n/a	8/16/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-7	0.125	n/a	8/16/2022	0.112J	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-8	0.125	n/a	8/16/2022	0.0979J	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-9	0.125	n/a	8/17/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-1	7.53	5.25	8/18/2022	7.46	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-10	7.53	5.25	8/17/2022	6.97	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-11	7.53	5.25	8/17/2022	5.6	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-12	7.53	5.25	8/18/2022	6.82	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-13	7.53	5.25	8/16/2022	6.92	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-5	7.53	5.25	8/16/2022	6.28	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
<b>pH (pH)</b>	<b>GN-GSA-MW-6</b>	<b>7.53</b>	<b>5.25</b>	<b>8/16/2022</b>	<b>4.58</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005943</b>	<b>NP Inter (normality) 1 of 2</b>
pH (pH)	GN-GSA-MW-7	7.53	5.25	8/16/2022	6.7	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-8	7.53	5.25	8/16/2022	6.98	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-9	7.53	5.25	8/17/2022	6.84	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2



# Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 3:53 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-1	2.203	108	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-10	3.06	110	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-12	4.193	120	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-15 (bg)	-0.775	-135	-74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-3 (bg)	-9.218	-135	-74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-5	6.84	133	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-7	2.129	106	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-11	1.864	133	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-14S (bg)	-0.4137	-120	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-15 (bg)	-0.2784	-83	-74	Yes	19	5.263	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-15 (bg)	-0.06556	-121	-81	Yes	20	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-3 (bg)	-0.08873	-92	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-14S (bg)	-1.419	-105	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-0.2951	-75	-74	Yes	19	5.263	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-3 (bg)	-2.734	-153	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-5	20.53	131	74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-8	0.556	111	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-14S (bg)	-3.544	-79	-74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-15 (bg)	-3.792	-106	-74	Yes	19	5.263	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-3 (bg)	-27.73	-147	-74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-5	37.14	126	74	Yes	19	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 3:53 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>2.203</b>	<b>108</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-10</b>	<b>3.06</b>	<b>110</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>4.193</b>	<b>120</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-14S (bg)	0	-1	-74	No	19	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.775</b>	<b>-135</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-2 (bg)	1.61	68	74	No	19	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-9.218</b>	<b>-135</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>6.84</b>	<b>133</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-7</b>	<b>2.129</b>	<b>106</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-9	0.7442	17	74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>1.864</b>	<b>133</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-0.4137</b>	<b>-120</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.2784</b>	<b>-83</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>5.263</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	GN-GSA-MW-2 (bg)	0.009371	6	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-3 (bg)	-0.08132	-70	-74	No	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-1	0	0	81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-14S (bg)	0.004555	44	81	No	20	30	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-15 (bg)	0	70	81	No	20	75	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-2 (bg)	0.002307	50	81	No	20	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-3 (bg)	0	13	81	No	20	15	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-14S (bg)	-0.02015	-58	-81	No	20	0	n/a	n/a	0.01	NP
<b>pH (pH)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.06556</b>	<b>-121</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (pH)	GN-GSA-MW-2 (bg)	-0.01798	-70	-81	No	20	0	n/a	n/a	0.01	NP
<b>pH (pH)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-0.08873</b>	<b>-92</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (pH)	GN-GSA-MW-6	-0.0226	-53	-81	No	20	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-1.419</b>	<b>-105</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.2951</b>	<b>-75</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>5.263</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GN-GSA-MW-2 (bg)	0.2537	51	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-2.734</b>	<b>-153</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>20.53</b>	<b>131</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>0.556</b>	<b>111</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-3.544</b>	<b>-79</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-3.792</b>	<b>-106</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>5.263</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GN-GSA-MW-2 (bg)	-1.575	-39	-74	No	19	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-27.73</b>	<b>-147</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>37.14</b>	<b>126</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Upper Tolerance Limits - Summary Table

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 1/11/2022, 10:38 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq 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)	n/a	0.00117	n/a	n/a	n/a	68	n/a	n/a	95.59	n/a	n/a	0.03056	NP Inter
Arsenic (mg/L)	n/a	0.00032	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Barium (mg/L)	n/a	0.0622	n/a	n/a	n/a	68	n/a	n/a	0	n/a	n/a	0.03056	NP Inter
Beryllium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Cadmium (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Chromium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Cobalt (mg/L)	n/a	0.00313	n/a	n/a	n/a	68	n/a	n/a	94.12	n/a	n/a	0.03056	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	2.36	n/a	n/a	n/a	68	n/a	n/a	2.941	n/a	n/a	0.03056	NP Inter
Fluoride (mg/L)	n/a	0.111	n/a	n/a	n/a	72	n/a	n/a	37.5	n/a	n/a	0.02489	NP Inter
Lead (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Lithium (mg/L)	n/a	0.02	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Molybdenum (mg/L)	n/a	0.00046	n/a	n/a	n/a	68	n/a	n/a	92.65	n/a	n/a	0.03056	NP Inter
Selenium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter
Thallium (mg/L)	n/a	0.000228	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter

<b>GASTON GYPSUM POND GWPS</b>			
<b>Analyte</b>	<b>Units</b>	<b>Background</b>	<b>GWPS</b>
Antimony	mg/L	0.00117	0.006
Arsenic	mg/L	0.00032	0.01
Barium	mg/L	0.0622	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.00102	0.1
Cobalt	mg/L	0.00313	0.006
Combined Radium-226/228	pCi/L	2.36	5
Fluoride	mg/L	0.111	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00046	0.1
Selenium	mg/L	0.00102	0.05
Thallium	mg/L	0.000228	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2021.

# Confidence Intervals - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 4:19 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	GN-GSA-MW-1	2.586	2.004	2	n/a	Yes	8	2.295	0.2746	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 4:19 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.001015	0.000909	0.006	n/a	No	8	0.001002	0.00003748	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.001015	0.000916	0.006	n/a	No	8	0.001003	0.000035	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.001015	0.000813	0.006	n/a	No	8	0.0009898	0.00007142	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.00127	0.001015	0.006	n/a	No	8	0.001047	0.00009016	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-5	0.00241	0.001015	0.006	n/a	No	8	0.001189	0.0004932	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.00171	0.001015	0.006	n/a	No	8	0.001102	0.0002457	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.00123	0.001015	0.006	n/a	No	8	0.001042	0.00007601	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.00106	0.001015	0.006	n/a	No	8	0.001021	0.00001591	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.00112	0.001015	0.006	n/a	No	8	0.001028	0.00003712	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.006341	0.002522	0.01	n/a	No	8	0.004431	0.001802	0	None	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-10	0.000203	0.00007	0.01	n/a	No	8	0.0001719	0.00005779	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.000203	0.00009	0.01	n/a	No	8	0.0001518	0.00005514	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-12	0.00033	0.000189	0.01	n/a	No	8	0.0002214	0.00004536	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-13	0.00348	0.00012	0.01	n/a	No	8	0.0005836	0.001171	37.5	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-5	0.002162	0.0002509	0.01	n/a	No	8	0.00118	0.001084	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-6	0.000203	0.00008	0.01	n/a	No	8	0.000163	0.00005583	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.0005823	0.0001943	0.01	n/a	No	8	0.0003916	0.0002667	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-8	0.001344	0.001191	0.01	n/a	No	8	0.001268	0.00007186	0	None	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-9	0.0002016	0.00008981	0.01	n/a	No	8	0.0001819	0.00004747	50	Kaplan-Meier	x^2	0.01	Param.
<b>Barium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>2.586</b>	<b>2.004</b>	<b>2</b>	<b>n/a</b>	<b>Yes</b>	<b>8</b>	<b>2.295</b>	<b>0.2746</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Barium (mg/L)	GN-GSA-MW-10	0.03865	0.03312	2	n/a	No	8	0.03589	0.002609	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.01245	0.00438	2	n/a	No	8	0.008303	0.004187	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GN-GSA-MW-12	0.02496	0.01911	2	n/a	No	8	0.02204	0.002758	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.0697	0.0369	2	n/a	No	8	0.04414	0.01066	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-5	0.07521	0.04612	2	n/a	No	8	0.06066	0.01372	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-6	0.0214	0.0156	2	n/a	No	8	0.01743	0.001828	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-7	0.0256	0.016	2	n/a	No	8	0.01853	0.003156	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-8	0.0314	0.0257	2	n/a	No	8	0.02739	0.002004	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-9	0.02581	0.02211	2	n/a	No	8	0.02396	0.001748	0	None	No	0.01	Param.
Cadmium (mg/L)	GN-GSA-MW-10	0.0002	0.00008	0.005	n/a	No	8	0.0001779	0.00004429	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.001015	0.00021	0.1	n/a	No	8	0.0009144	0.0002846	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.001015	0.00023	0.1	n/a	No	8	0.0008233	0.0003552	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.001015	0.0003	0.1	n/a	No	8	0.0009256	0.0002528	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-12	0.001015	0.00021	0.1	n/a	No	8	0.0008238	0.0003548	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.0009794	0.0003691	0.1	n/a	No	8	0.0008846	0.0005167	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GN-GSA-MW-5	0.001015	0.000271	0.1	n/a	No	8	0.0007395	0.0003803	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.001015	0.00022	0.1	n/a	No	8	0.0007253	0.0004	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.001015	0.000361	0.1	n/a	No	8	0.0007995	0.0003027	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.001015	0.000291	0.1	n/a	No	8	0.0006885	0.0003513	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GN-GSA-MW-9	0.001015	0.00021	0.1	n/a	No	8	0.000822	0.0003578	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.003081	0.001653	0.006	n/a	No	8	0.002312	0.0009354	12.5	None	x^2	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-12	0.00042	0.00016	0.006	n/a	No	8	0.0002367	0.00008344	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-13	0.0002	0.000088	0.006	n/a	No	8	0.0001682	0.00004817	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.004408	0.0003572	0.006	n/a	No	8	0.002382	0.002043	25	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-6	0.000713	0.0002	0.006	n/a	No	8	0.0004381	0.0002552	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-7	0.000978	0.0001861	0.006	n/a	No	8	0.0006106	0.0006633	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-8	0.0002	0.00007	0.006	n/a	No	8	0.0001582	0.00004924	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-9	0.00041	0.0000816	0.006	n/a	No	8	0.0002029	0.00009462	62.5	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.773	0.8922	5	n/a	No	8	1.323	0.4722	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	1.941	0.2053	5	n/a	No	8	1.122	1.636	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.583	0.0765	5	n/a	No	8	0.7884	1.112	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	1.404	0.2217	5	n/a	No	8	0.8128	0.576	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	1.623	0.2398	5	n/a	No	8	0.9659	1.222	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	0.9981	0.08236	5	n/a	No	8	0.5403	0.432	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	1.242	0.07461	5	n/a	No	8	0.6585	0.5509	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.8842	0.1152	5	n/a	No	8	0.4797	0.3731	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.841	0.09728	5	n/a	No	8	0.4692	0.3509	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	1.072	0.1691	5	n/a	No	8	0.6204	0.4258	0	None	No	0.01	Param.

# Confidence Intervals - All Results

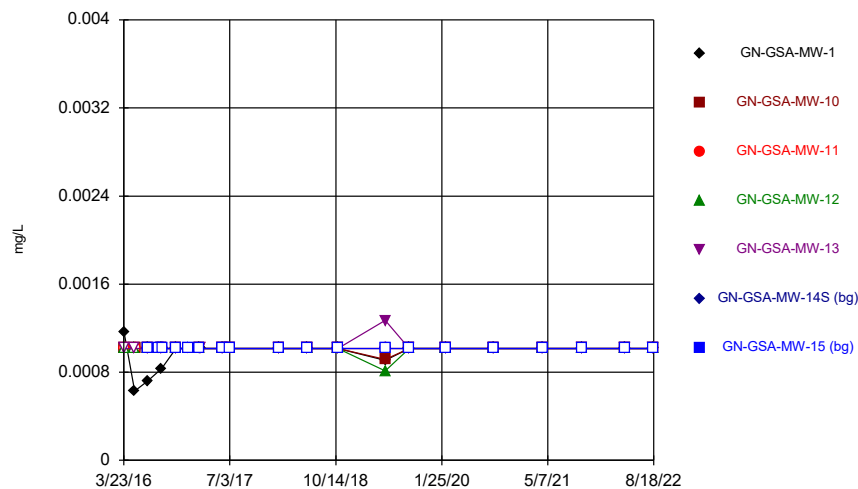
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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GN-GSA-MW-1	0.3483	0.2787	4	n/a	No	8	0.3135	0.03287	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-10	0.125	0.0617	4	n/a	No	8	0.1171	0.02238	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GN-GSA-MW-12	0.125	0.0547	4	n/a	No	8	0.09328	0.03414	50	None	No	0.004	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.125	0.0555	4	n/a	No	8	0.07875	0.02908	25	None	No	0.004	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-5	0.125	0.0842	4	n/a	No	8	0.1163	0.01643	75	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GN-GSA-MW-7	0.1243	0.07682	4	n/a	No	8	0.1006	0.0224	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1374	0.08581	4	n/a	No	8	0.1116	0.02435	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.125	0.0526	4	n/a	No	8	0.09565	0.03418	50	None	No	0.004	NP (normality)
Lead (mg/L)	GN-GSA-MW-11	0.000203	0.000078	0.015	n/a	No	8	0.0001758	0.00005118	75	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.00228	0.000203	0.015	n/a	No	8	0.0004626	0.0007343	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.0004	0.000203	0.015	n/a	No	8	0.0002681	0.00007555	50	None	No	0.004	NP (normality)
Lead (mg/L)	GN-GSA-MW-9	0.000203	0.00011	0.015	n/a	No	8	0.0001914	0.00003288	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.02	0.00953	0.04	n/a	No	8	0.01357	0.005326	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-1	0.004843	0.003184	0.1	n/a	No	8	0.004014	0.0007825	0	None	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-12	0.01	0.000207	0.1	n/a	No	8	0.005143	0.005192	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-13	0.01	0.00016	0.1	n/a	No	8	0.005092	0.005247	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-5	0.01	0.00009	0.1	n/a	No	8	0.005054	0.005287	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-7	0.01	0.000232	0.1	n/a	No	8	0.005128	0.005208	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-8	0.00411	0.003195	0.1	n/a	No	8	0.003653	0.0004318	0	None	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.01	0.000207	0.1	n/a	No	8	0.005134	0.005202	50	None	No	0.004	NP (normality)

FIGURE A.

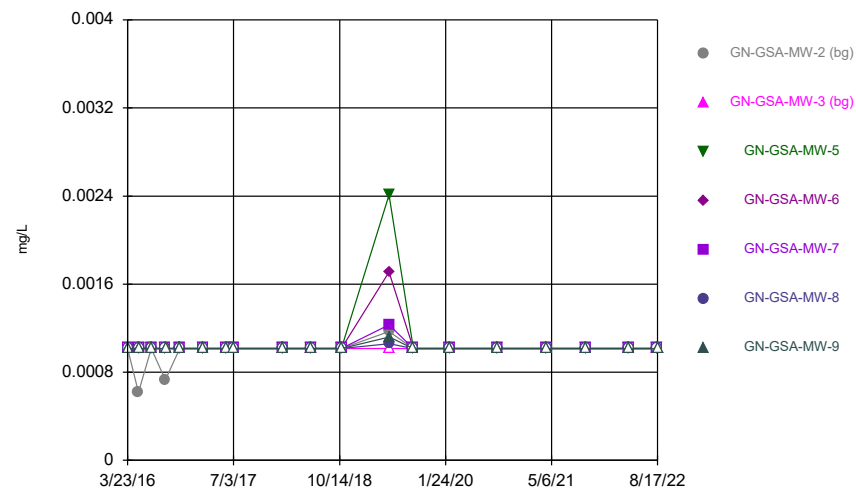


### Time Series



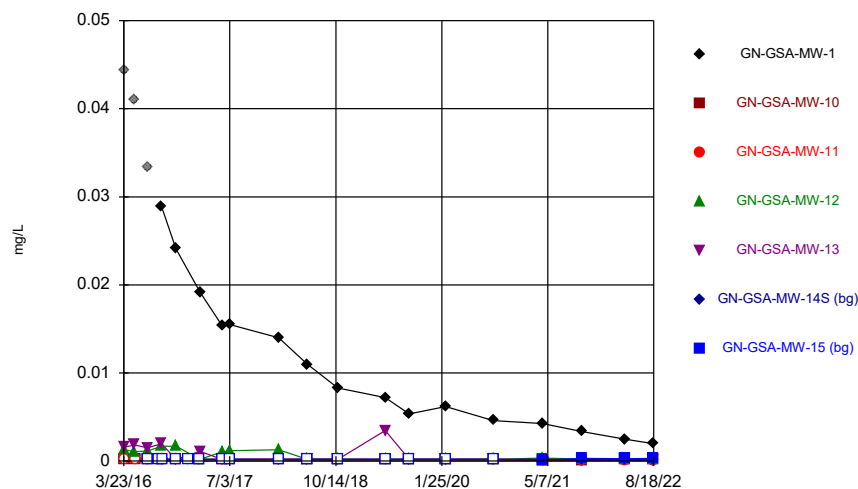
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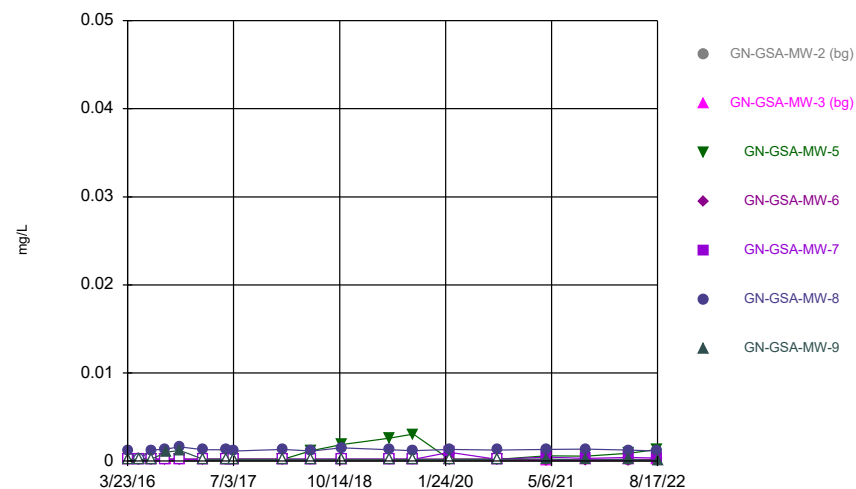
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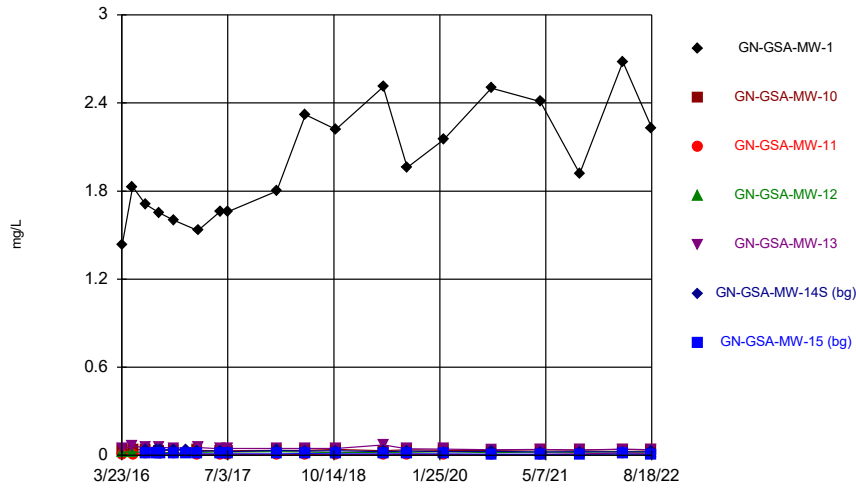
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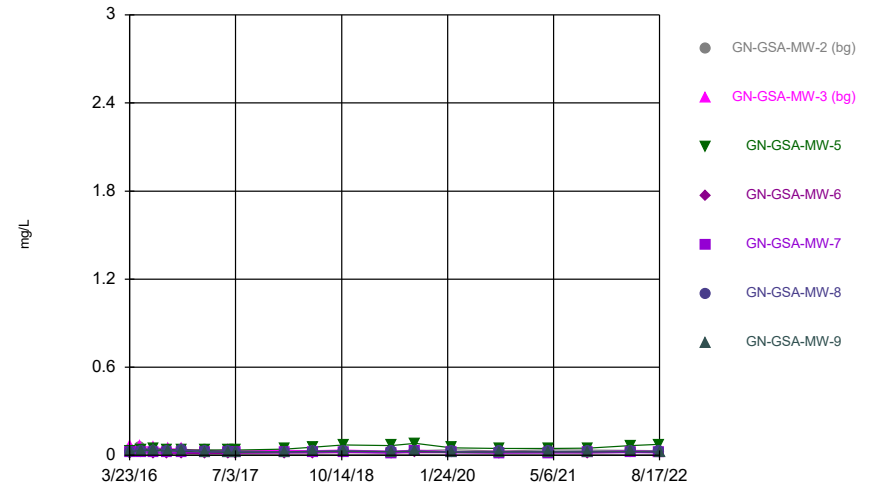
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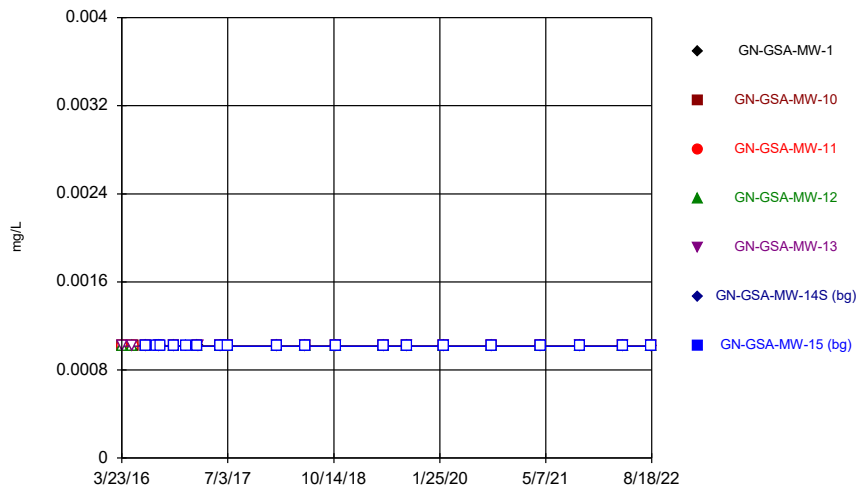
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Time Series



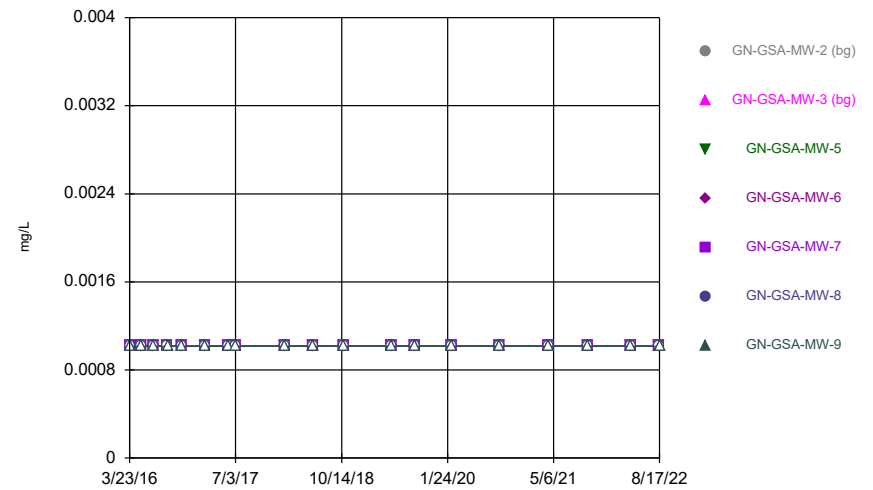
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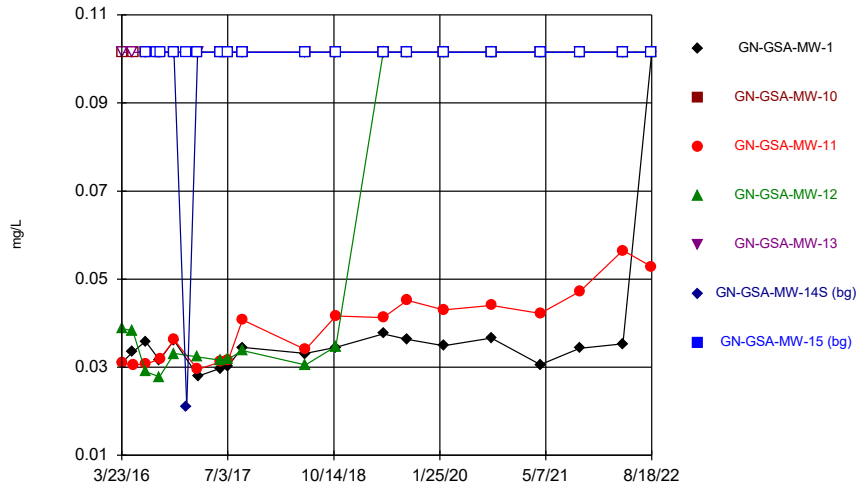
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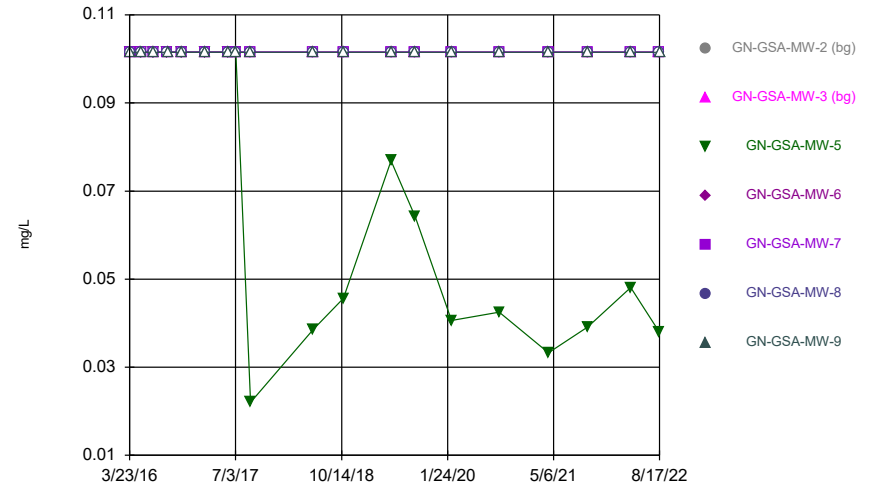
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Time Series



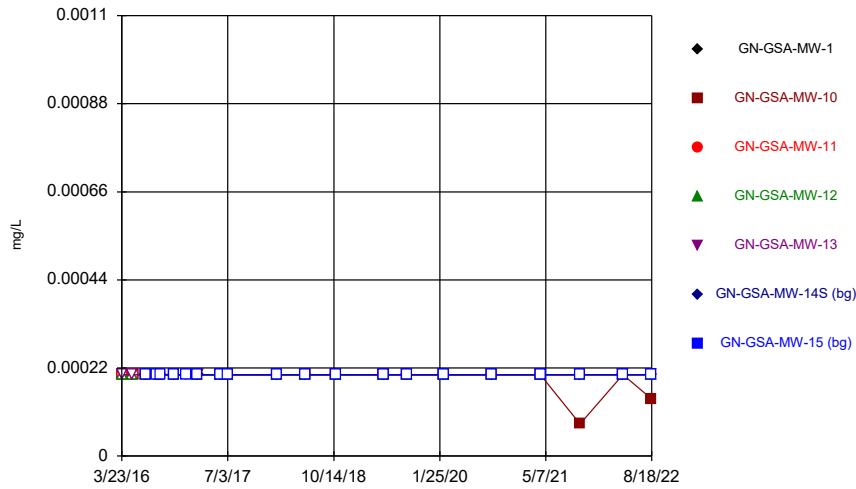
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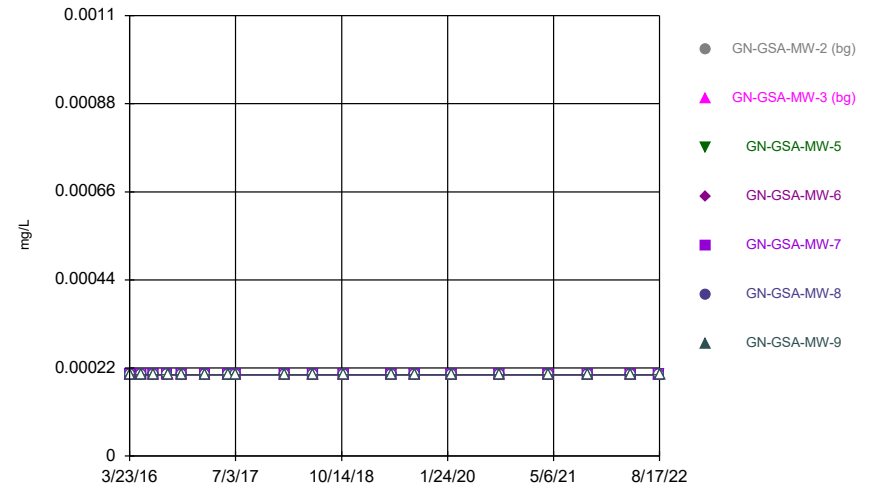
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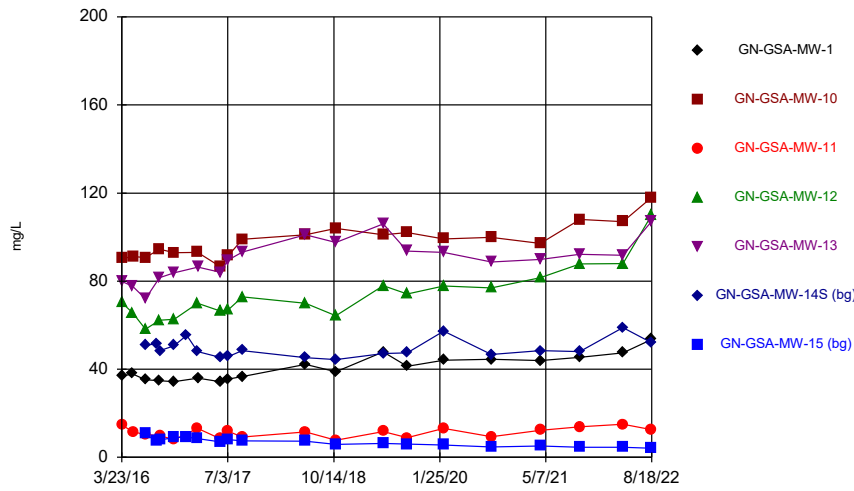
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Time Series



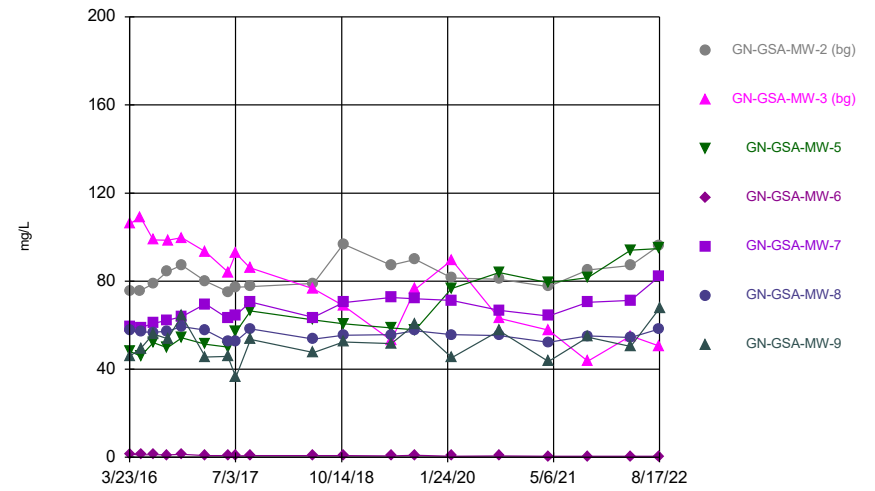
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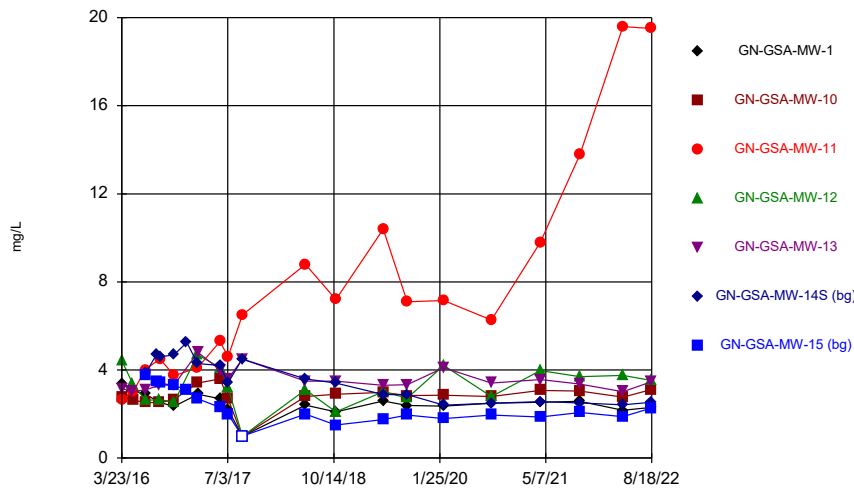
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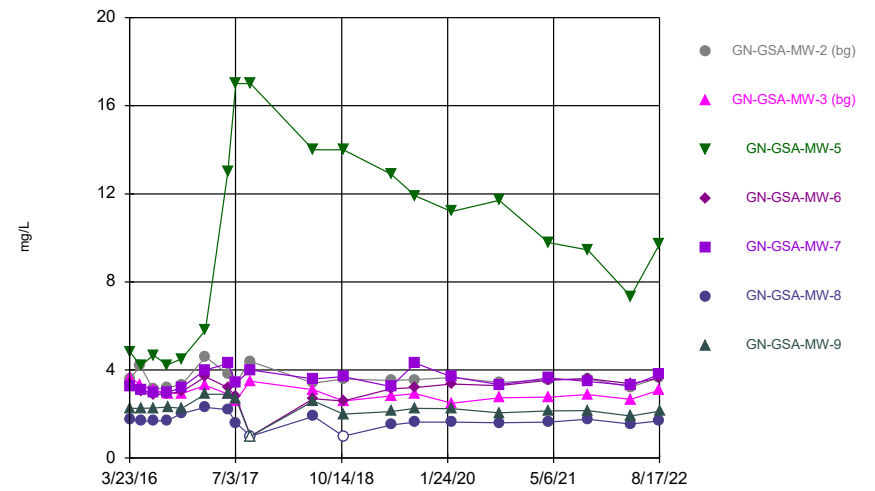
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Time Series



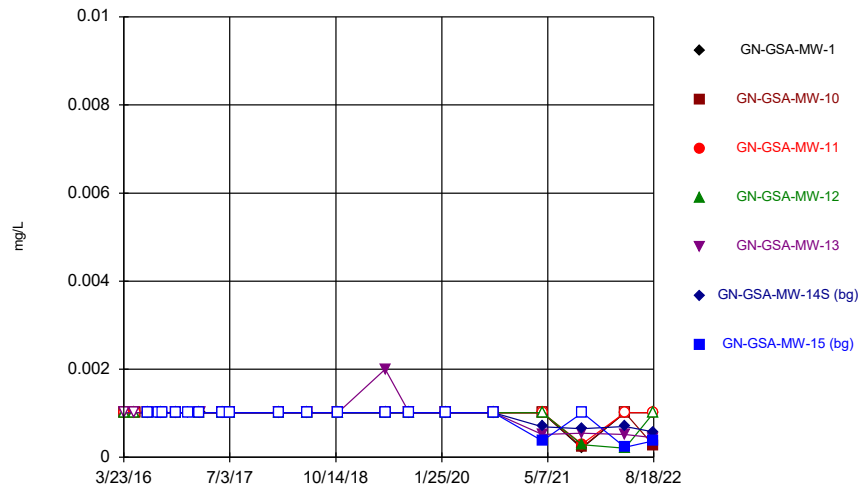
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Time Series



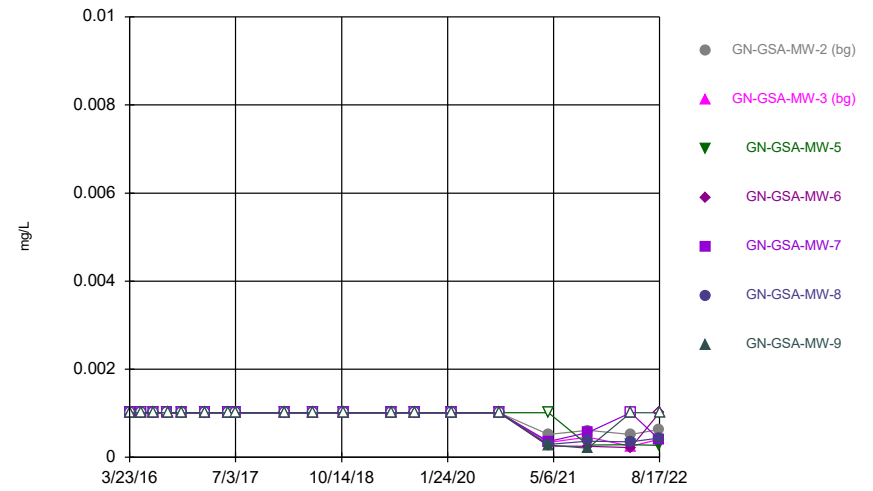
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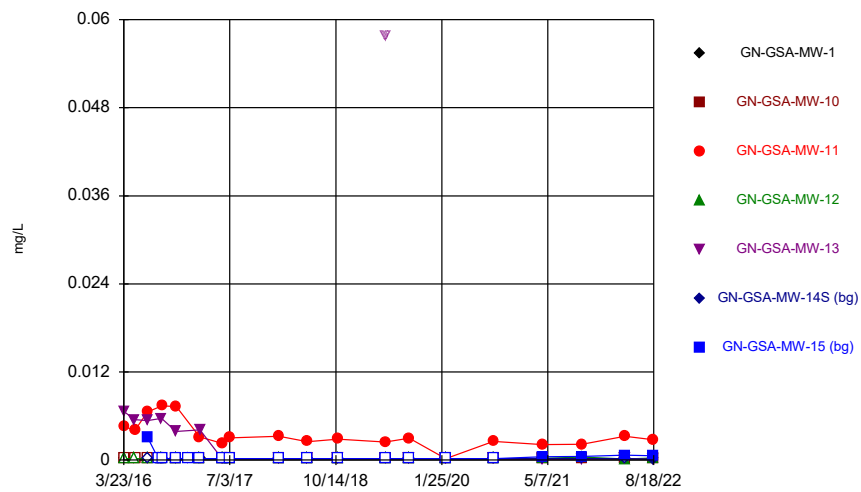
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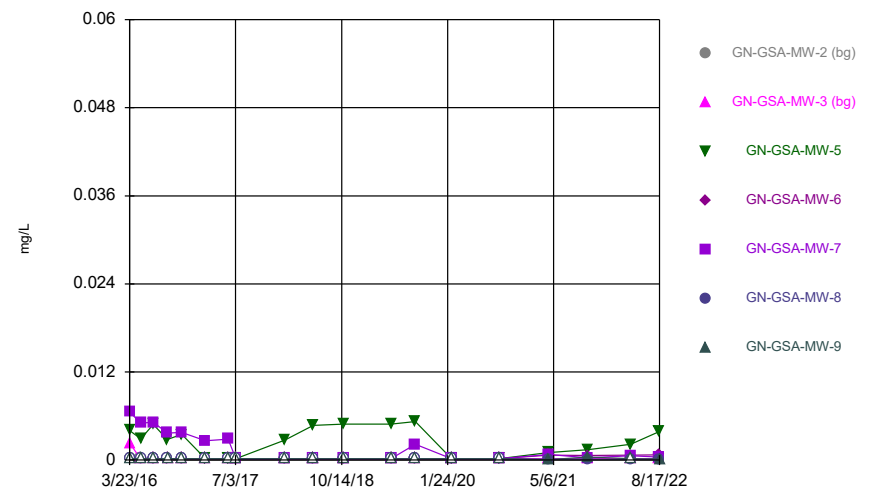
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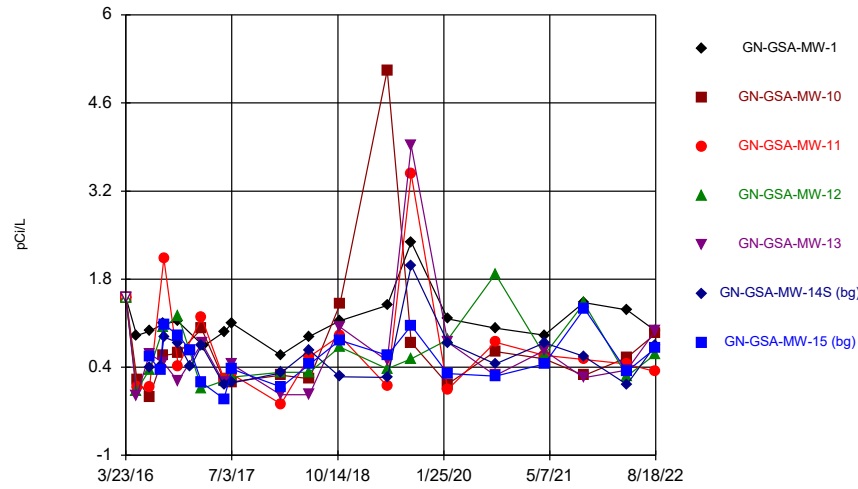
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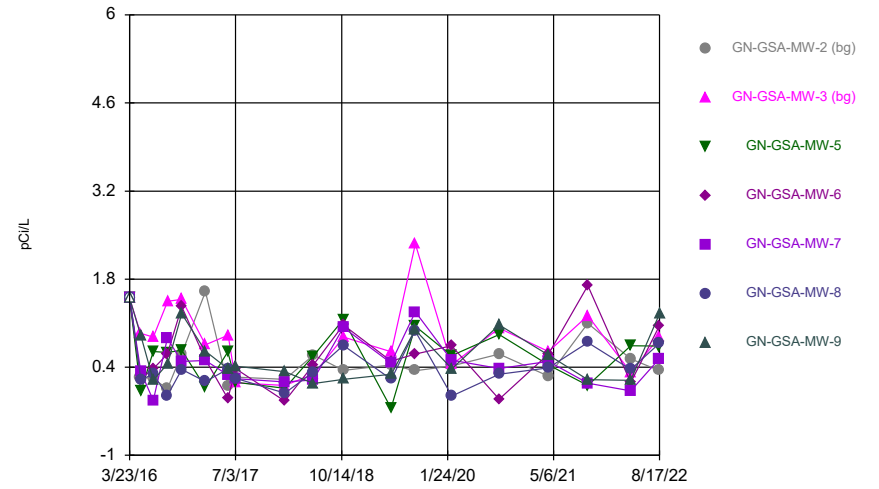
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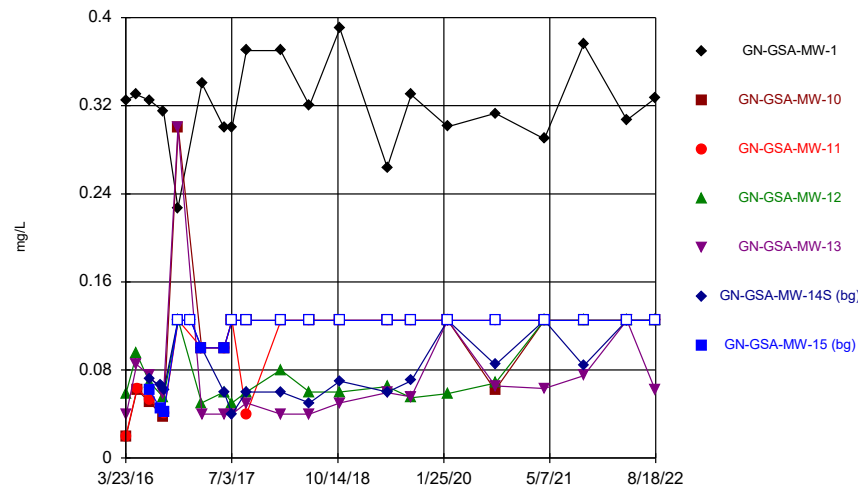
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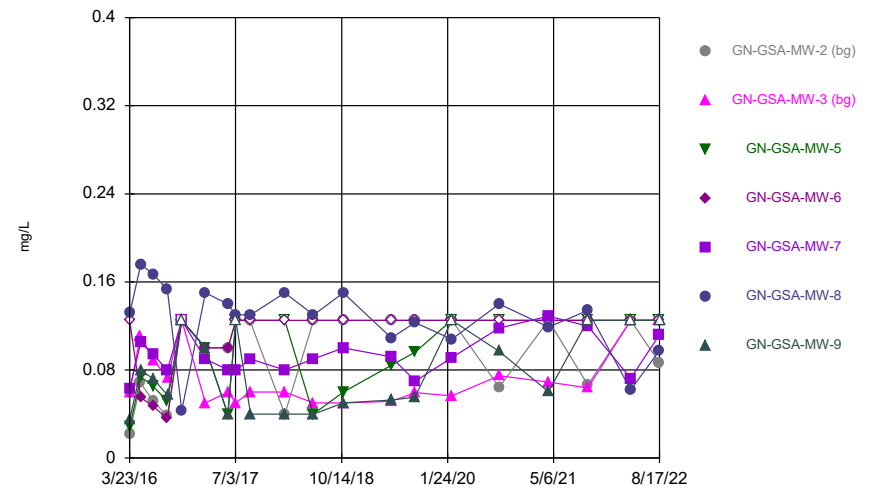
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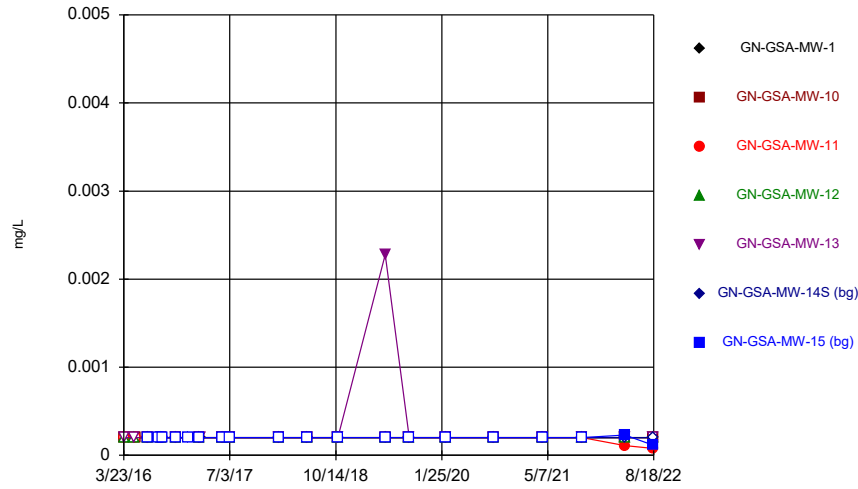
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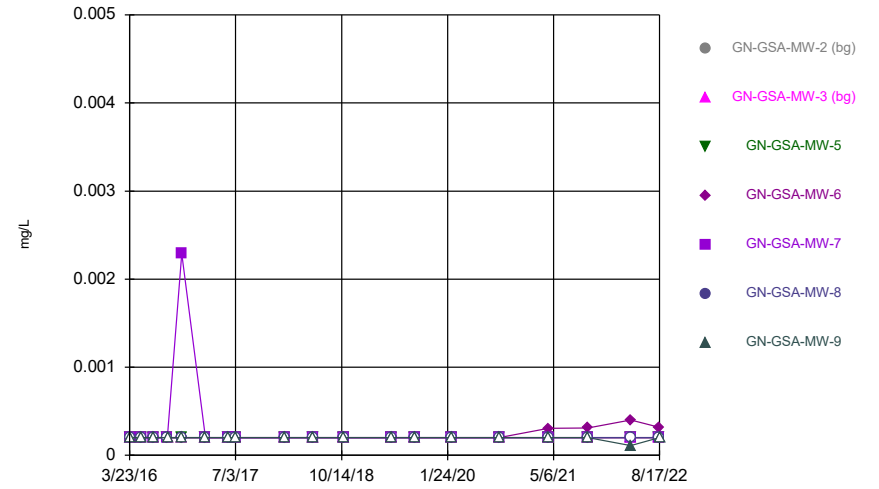
Constituent: Fluoride Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



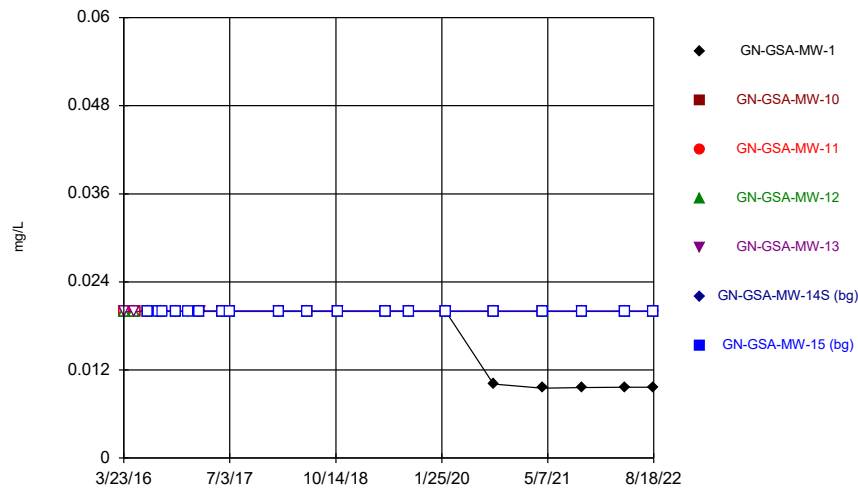
Constituent: Lead Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



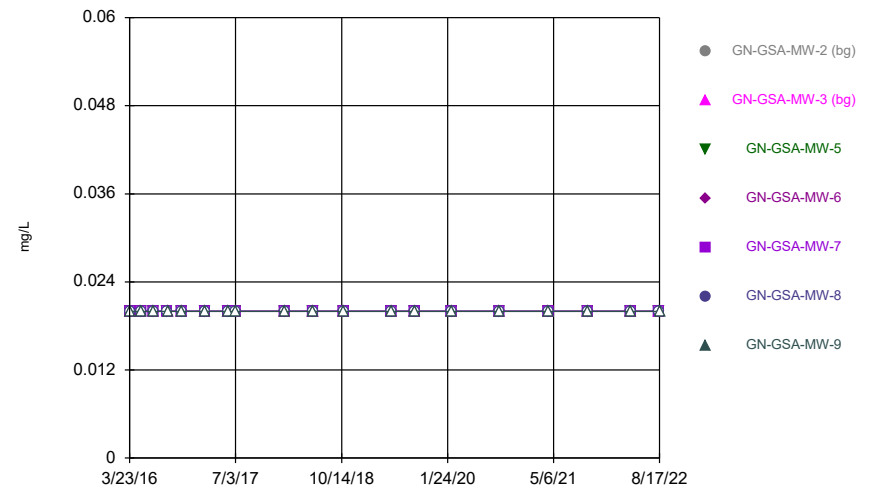
Constituent: Lead Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



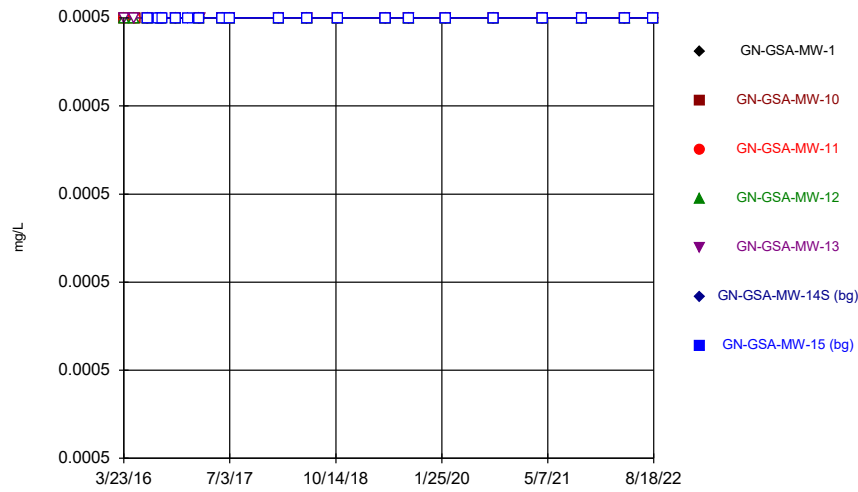
Constituent: Lithium Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



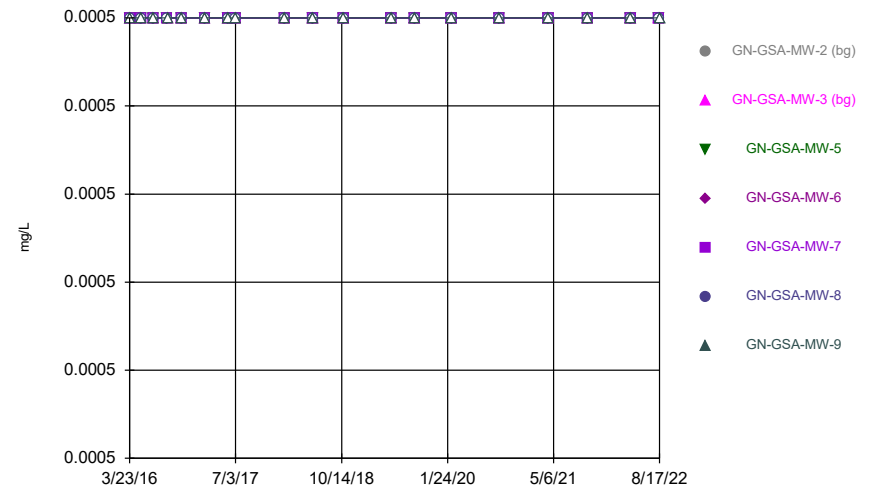
Constituent: Lithium Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



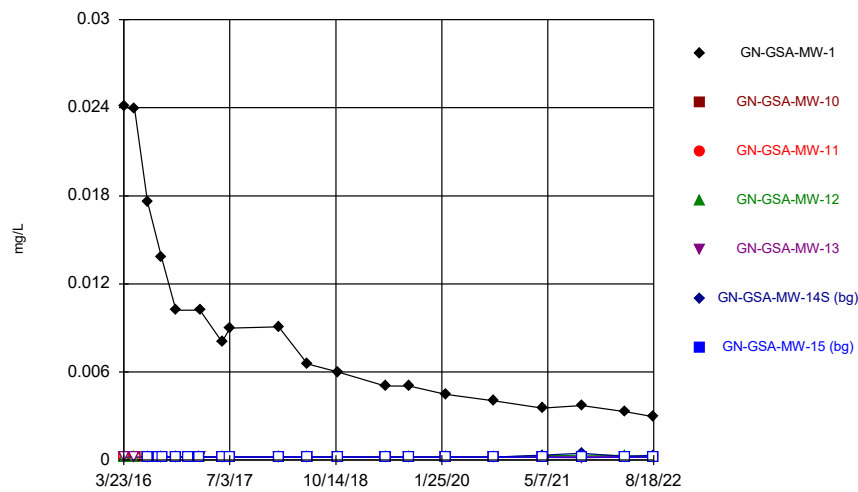
Constituent: Mercury Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



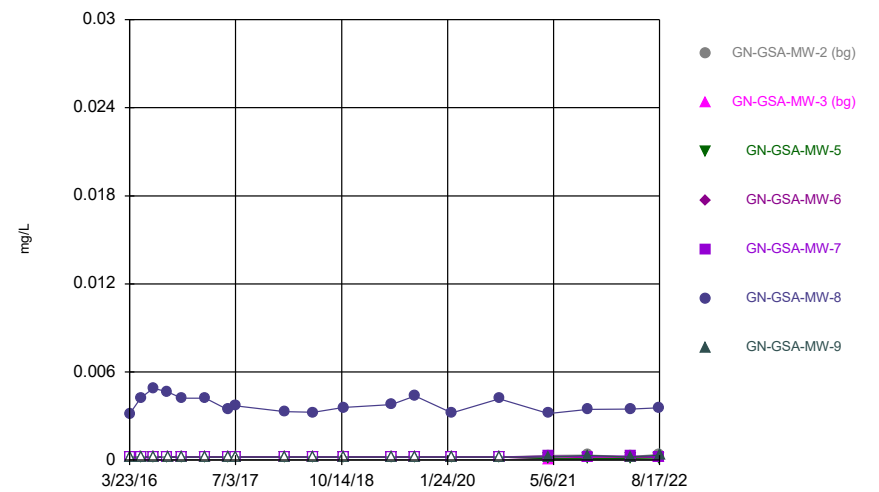
Constituent: Mercury Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



Constituent: Molybdenum Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

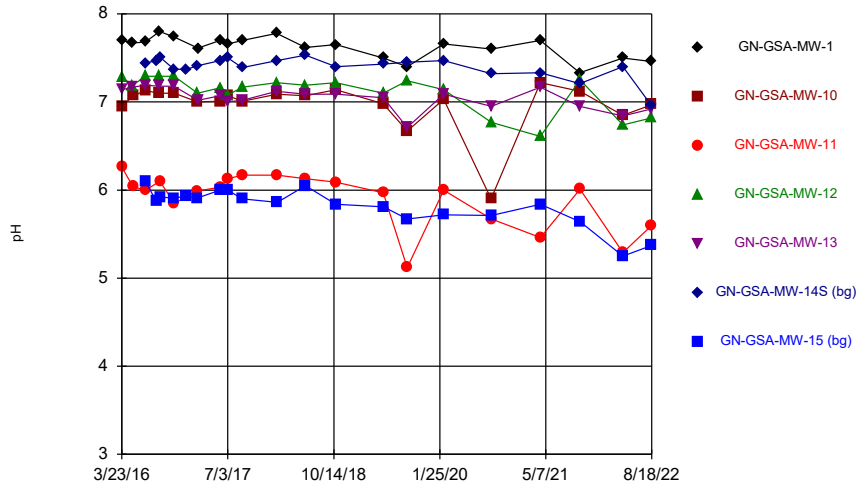
Time Series



Constituent: Molybdenum Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

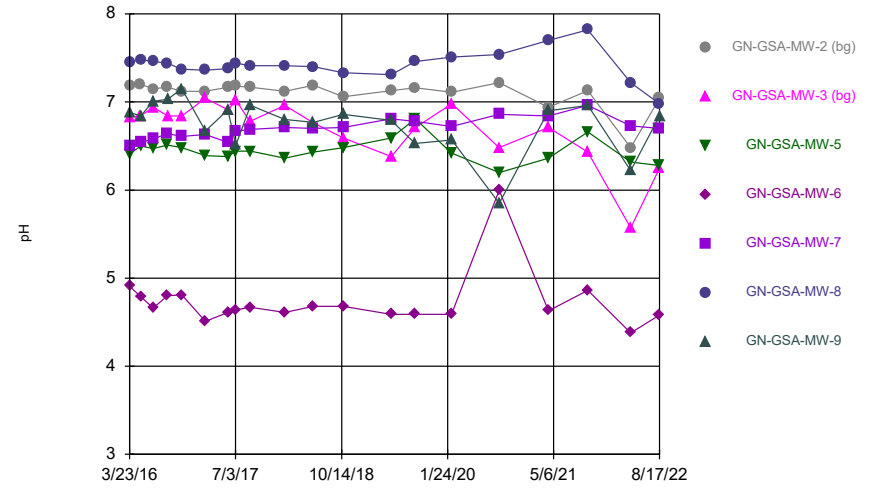


Time Series



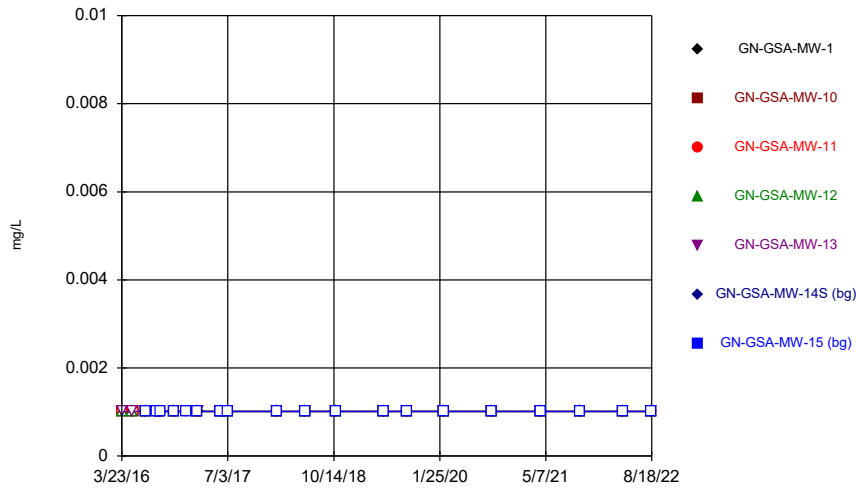
Constituent: pH Analysis Run 10/3/2022 2:43 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



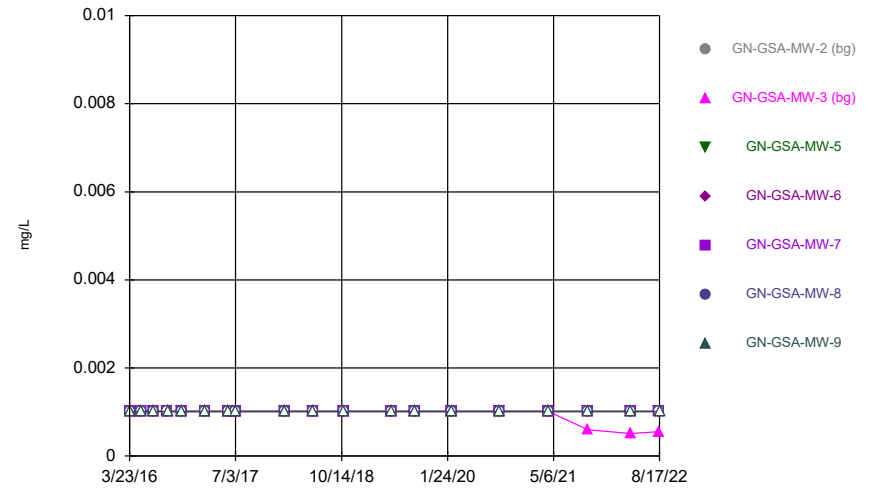
Constituent: pH Analysis Run 10/3/2022 2:43 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



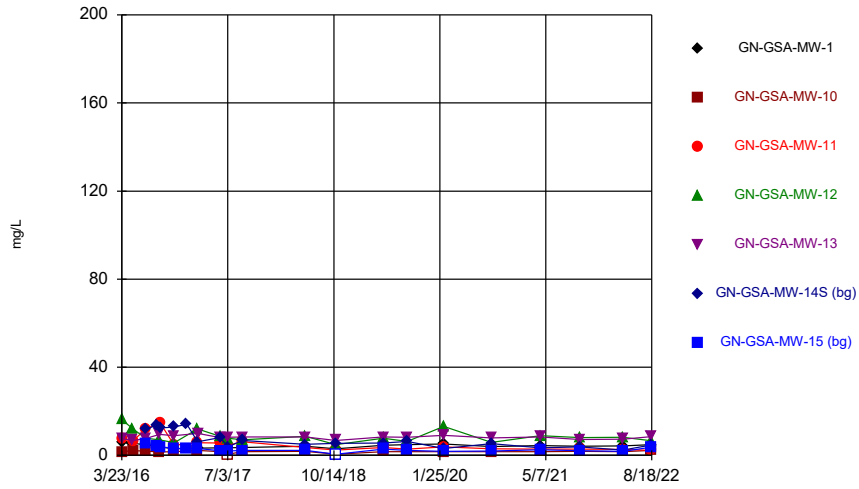
Constituent: Selenium Analysis Run 10/3/2022 2:43 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



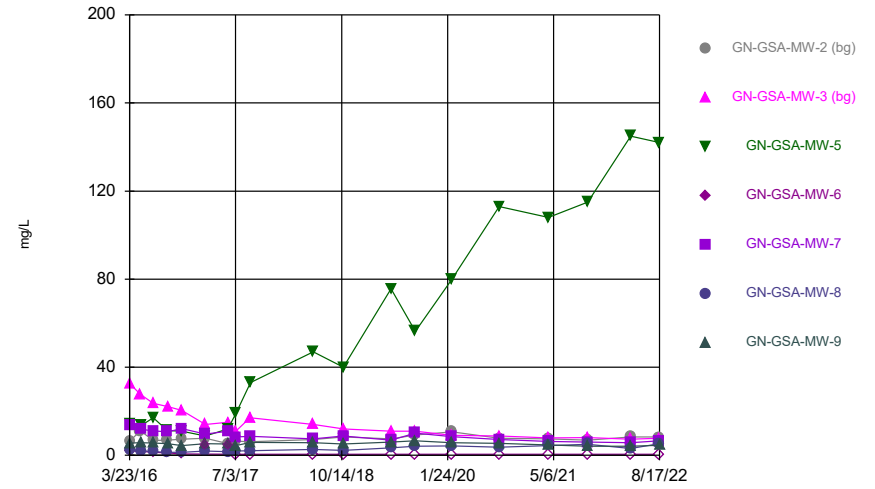
Constituent: Selenium Analysis Run 10/3/2022 2:43 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



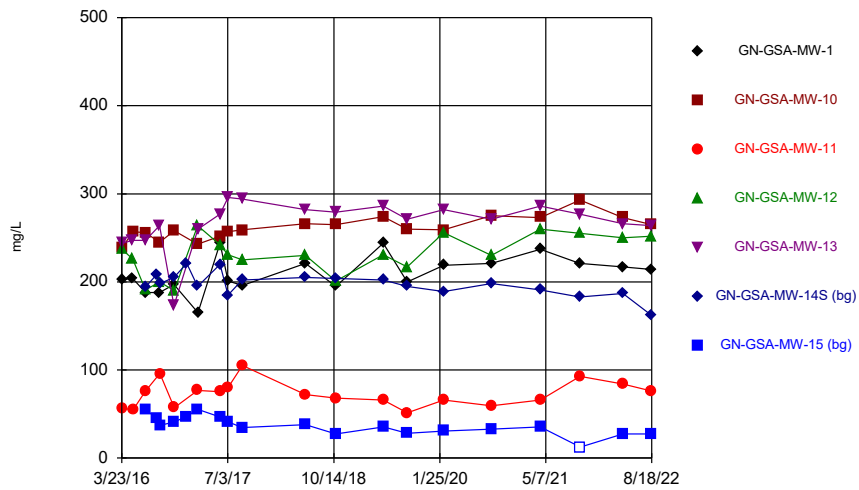
Constituent: Sulfate Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



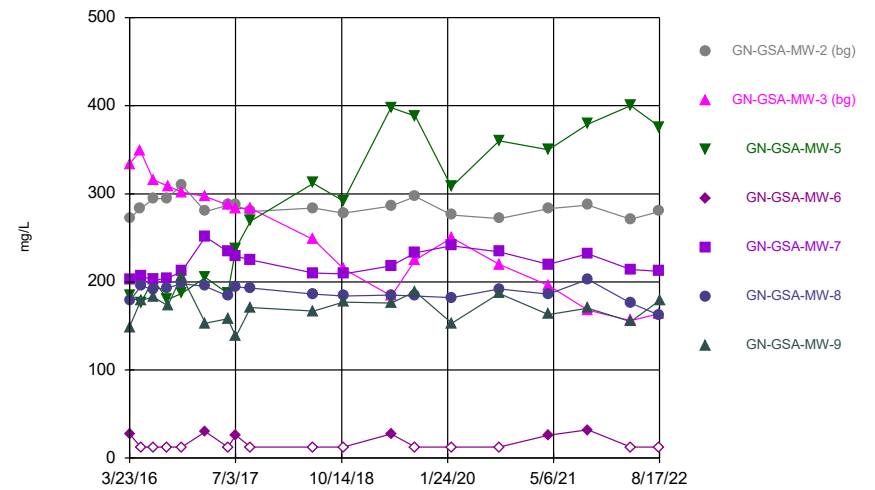
Constituent: Sulfate Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



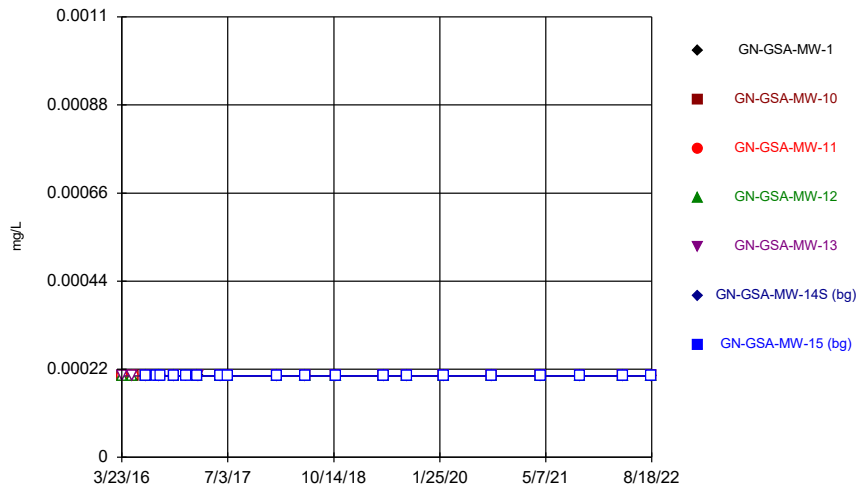
Constituent: TDS Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



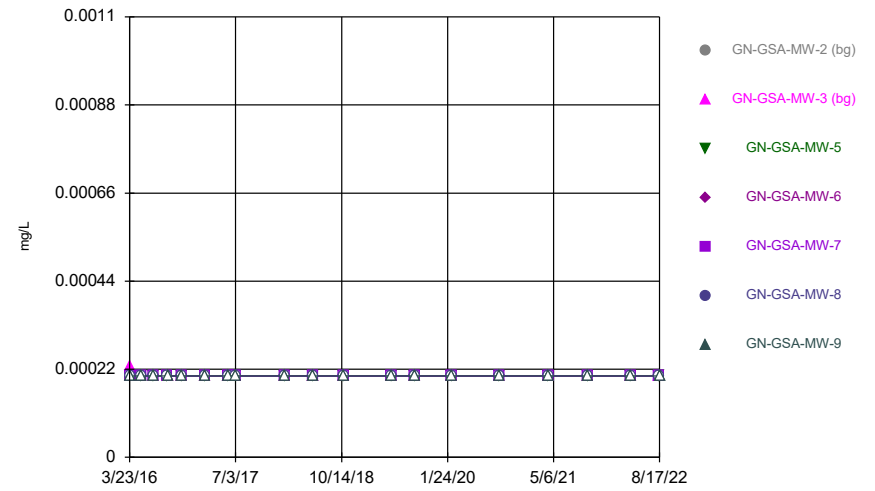
Constituent: TDS Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



Constituent: Thallium Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Time Series



Constituent: Thallium Analysis Run 10/3/2022 2:43 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

# Time Series

Constituent: Antimony (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.001015	<0.001015			
3/24/2016	0.00116 (J)	<0.001015			<0.001015		
5/10/2016	0.000629 (J)			<0.001015	<0.001015		
5/11/2016		<0.001015	<0.001015				
7/5/2016	0.000718 (J)					<0.001015	
7/6/2016		<0.001015	<0.001015	<0.001015	<0.001015		<0.001015
8/23/2016						<0.001015	<0.001015
9/6/2016	0.000833 (J)	<0.001015		<0.001015	<0.001015		
9/7/2016			<0.001015			<0.001015	<0.001015
11/8/2016	<0.001015				<0.001015	<0.001015	<0.001015
11/9/2016		<0.001015	<0.001015	<0.001015			
1/3/2017						<0.001015	<0.001015
2/20/2017							<0.001015
2/21/2017		<0.001015	<0.001015	<0.001015		<0.001015	
2/22/2017	<0.001015				<0.001015		
5/31/2017	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
7/5/2017	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/5/2018	<0.001015			<0.001015	<0.001015		
2/6/2018		<0.001015	<0.001015			<0.001015	
2/7/2018							<0.001015
6/12/2018	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
10/23/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
10/24/2018		<0.001015	<0.001015				
5/21/2019	0.000909 (J)	0.000916 (J)	<0.001015	0.000813 (J)	0.00127 (J)		
5/22/2019						<0.001015	<0.001015
9/3/2019		<0.001015	<0.001015				
9/4/2019	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
2/12/2020	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
9/8/2020		<0.001015					
9/9/2020	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
4/13/2021	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
10/4/2021	<0.001015				<0.001015	<0.001015	
10/5/2021		<0.001015	<0.001015	<0.001015			
10/6/2021							<0.001015
4/12/2022							<0.001015
4/13/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
8/16/2022					<0.001015	<0.001015	<0.001015
8/17/2022		<0.001015	<0.001015				
8/18/2022	<0.001015			<0.001015			



# Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.000203	0.0013 (J)			
3/24/2016	0.0444 (o)	<0.000203			0.00157 (J)		
5/10/2016	0.041 (o)			0.00107 (J)	0.00182 (J)		
5/11/2016		<0.000203	<0.000203				
7/5/2016	0.0333 (o)					<0.000203	
7/6/2016		<0.000203	<0.000203	0.00113 (J)	0.00152 (J)		<0.000203
8/23/2016						<0.000203	<0.000203
9/6/2016	0.0289	<0.000203		0.00169 (J)	0.00197 (J)		
9/7/2016			<0.000203			<0.000203	<0.000203
11/8/2016	0.0241				<0.000203	<0.000203	<0.000203
11/9/2016		<0.000203	<0.000203	0.00168 (J)			
1/3/2017						<0.000203	<0.000203
2/20/2017							<0.000203
2/21/2017		<0.000203	<0.000203	<0.000203		<0.000203	
2/22/2017	0.0192				0.0011 (J)		
5/31/2017	0.0154	<0.000203	<0.000203	0.00102 (J)	<0.000203	<0.000203	<0.000203
7/5/2017	0.0155	<0.000203	<0.000203	0.00117 (J)	<0.000203	<0.000203	<0.000203
2/5/2018	0.014			0.00127 (J)	<0.000203		
2/6/2018		<0.000203	<0.000203			<0.000203	
2/7/2018							<0.000203
6/12/2018	0.011	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
10/23/2018	0.00829			<0.000203	<0.000203	<0.000203	<0.000203
10/24/2018		<0.000203	<0.000203				
5/21/2019	0.00722	<0.000203	<0.000203	<0.000203	0.00348 (J)		
5/22/2019						<0.000203	<0.000203
9/3/2019		<0.000203	<0.000203				
9/4/2019	0.00534			<0.000203	<0.000203	<0.000203	<0.000203
2/12/2020	0.0062	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
9/8/2020		<0.000203					
9/9/2020	0.0046 (J)		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
4/13/2021	0.00427	8.71E-05 (J)	9.35E-05 (J)	0.00033	0.000189 (J)	0.000187 (J)	0.000134 (J)
10/4/2021	0.00335				0.00012 (J)	0.00016 (J)	
10/5/2021		7E-05 (J)	0.00011 (J)	0.00023			
10/6/2021							0.00032
4/12/2022							0.00028
4/13/2022	0.00248	<0.000203	9E-05 (J)	0.00021	0.00014 (J)	0.00014 (J)	
8/16/2022					0.000131 (J)	0.00014 (J)	0.000298
8/17/2022		<0.000203	0.000109 (J)				
8/18/2022	0.00199			0.000189 (J)			



# Time Series

Constituent: Barium (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			0.00756 (J)	0.0224			
3/24/2016	1.43	0.0339			0.0432		
5/10/2016	1.83			0.0232	0.0609		
5/11/2016		0.0375	0.00769 (J)				
7/5/2016	1.71					0.0375	
7/6/2016		0.0374	0.00975 (J)	0.0199	0.0542		0.014
8/23/2016						0.0353	0.00858 (J)
9/6/2016	1.65	0.0331		0.0195	0.0544		
9/7/2016			0.0101			0.0365	0.00994 (J)
11/8/2016	1.6				0.0491	0.0393	0.0108
11/9/2016		0.0367	0.00934 (J)	0.017			
1/3/2017						0.0373	0.00989 (J)
2/20/2017							0.00932 (J)
2/21/2017		0.0335	0.00713 (J)	0.0214		0.0262	
2/22/2017	1.53				0.0537		
5/31/2017	1.66	0.0314	0.00552 (J)	0.0223	0.0452	0.0305	0.00876 (J)
7/5/2017	1.66	0.0321	0.00664 (J)	0.022	0.0461	0.0245	0.00935 (J)
2/5/2018	1.8			0.0254	0.0469		
2/6/2018		0.0337	0.00614 (J)			0.034	
2/7/2018							0.00897 (J)
6/12/2018	2.32	0.0342	0.00637 (J)	0.023	0.0469	0.0291	0.0112
10/23/2018	2.22			0.0176	0.0457	0.032	0.00948 (J)
10/24/2018		0.0393	0.00522 (J)				
5/21/2019	2.51	0.0323	0.0056 (J)	0.0214	0.0697		
5/22/2019						0.0257	0.00958 (J)
9/3/2019		0.0377	0.00656 (J)				
9/4/2019	1.96			0.0205	0.0455	0.0303	0.00964 (J)
2/12/2020	2.15	0.0344	0.00444 (J)	0.024	0.0419	0.0239	0.0088 (J)
9/8/2020		0.0331					
9/9/2020	2.5		0.00545 (J)	0.0182	0.039	0.0262	0.00706 (J)
4/13/2021	2.41	0.0373	0.00636	0.0234	0.0403	0.0217	0.00801
10/4/2021	1.92				0.0369	0.024	
10/5/2021		0.0359	0.00871	0.0212			
10/6/2021							0.00769
4/12/2022							0.00927
4/13/2022	2.68	0.0403	0.0162	0.0272	0.0415	0.0217	
8/16/2022					0.0383	0.0251	0.0074
8/17/2022		0.0361	0.0131				
8/18/2022	2.23			0.0204			





# Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.001015	<0.001015			
3/24/2016	<0.001015	<0.001015			<0.001015		
5/10/2016	<0.001015			<0.001015	<0.001015		
5/11/2016		<0.001015	<0.001015				
7/5/2016	<0.001015					<0.001015	
7/6/2016		<0.001015	<0.001015	<0.001015	<0.001015		<0.001015
8/23/2016						<0.001015	<0.001015
9/6/2016	<0.001015	<0.001015		<0.001015	<0.001015		
9/7/2016			<0.001015			<0.001015	<0.001015
11/8/2016	<0.001015				<0.001015	<0.001015	<0.001015
11/9/2016		<0.001015	<0.001015	<0.001015			
1/3/2017						<0.001015	<0.001015
2/20/2017							<0.001015
2/21/2017		<0.001015	<0.001015	<0.001015		<0.001015	
2/22/2017	<0.001015				<0.001015		
5/31/2017	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
7/5/2017	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/5/2018	<0.001015			<0.001015	<0.001015		
2/6/2018		<0.001015	<0.001015			<0.001015	
2/7/2018							<0.001015
6/12/2018	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
10/23/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
10/24/2018		<0.001015	<0.001015				
5/21/2019	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015		
5/22/2019						<0.001015	<0.001015
9/3/2019		<0.001015	<0.001015				
9/4/2019	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
2/12/2020	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
9/8/2020		<0.001015					
9/9/2020	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
4/13/2021	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
10/4/2021	<0.001015				<0.001015	<0.001015	
10/5/2021		<0.001015	<0.001015	<0.001015			
10/6/2021							<0.001015
4/12/2022							<0.001015
4/13/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
8/16/2022					<0.001015	<0.001015	<0.001015
8/17/2022		<0.001015	<0.001015				
8/18/2022	<0.001015			<0.001015			



# Time Series

Constituent: Boron (mg/L) Analysis Run 10/3/2022 2:46 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			0.0309 (J)	0.0387 (J)			
3/24/2016	0.0311 (J)	<0.1015			<0.1015		
5/10/2016	0.0334 (J)			0.0384 (J)	<0.1015		
5/11/2016		<0.1015	0.0306 (J)				
7/5/2016	0.0359 (J)					<0.1015	
7/6/2016		<0.1015	0.0307 (J)	0.029 (J)	<0.1015		<0.1015
8/23/2016						<0.1015	<0.1015
9/6/2016	0.0316 (J)	<0.1015		0.0278 (J)	<0.1015		
9/7/2016			0.0319 (J)			<0.1015	<0.1015
11/8/2016	0.0361 (J)				<0.1015	<0.1015	<0.1015
11/9/2016		<0.1015	0.0362 (J)	0.0331 (J)			
1/3/2017						0.0211 (J)	<0.1015
2/20/2017							<0.1015
2/21/2017		<0.1015	0.0295 (J)	0.0323 (J)		<0.1015	
2/22/2017	0.028 (J)				<0.1015		
5/31/2017	0.0297 (J)	<0.1015	0.0312 (J)	0.0316 (J)	<0.1015	<0.1015	<0.1015
7/5/2017	0.0302 (J)	<0.1015	0.0315 (J)	0.0318 (J)	<0.1015	<0.1015	<0.1015
9/5/2017						<0.1015	<0.1015
9/7/2017	0.0345 (J)	<0.1015	0.0408 (J)	0.0338 (J)	<0.1015		
6/12/2018	0.0331 (J)	<0.1015	0.034 (J)	0.0305 (J)	<0.1015	<0.1015	<0.1015
10/23/2018	0.0345 (J)			0.0347 (J)	<0.1015	<0.1015	<0.1015
10/24/2018		<0.1015	0.0416 (J)				
5/21/2019	0.0376 (J)	<0.1015	0.0413 (J)	<0.1015	<0.1015		
5/22/2019						<0.1015	<0.1015
9/3/2019		<0.1015	0.0452 (J)				
9/4/2019	0.0363 (J)			<0.1015	<0.1015	<0.1015	<0.1015
2/12/2020	0.0349 (J)	<0.1015	0.043 (J)	<0.1015	<0.1015	<0.1015	<0.1015
9/8/2020		<0.1015					
9/9/2020	0.0366 (J)		0.044 (J)	<0.1015	<0.1015	<0.1015	<0.1015
4/13/2021	0.0306 (J)	<0.1015	0.0422 (J)	<0.1015	<0.1015	<0.1015	<0.1015
10/4/2021	0.0343 (J)				<0.1015	<0.1015	
10/5/2021		<0.1015	0.0472 (J)	<0.1015			
10/6/2021							<0.1015
4/12/2022							<0.1015
4/13/2022	0.0353 (J)	<0.1015	0.0565 (J)	<0.1015	<0.1015	<0.1015	
8/16/2022					<0.1015	<0.1015	<0.1015
8/17/2022		<0.1015	0.0528 (J)				
8/18/2022	<0.1015			<0.1015			



# Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.000203	<0.000203			
3/24/2016	<0.000203	<0.000203			<0.000203		
5/10/2016	<0.000203			<0.000203	<0.000203		
5/11/2016		<0.000203	<0.000203				
7/5/2016	<0.000203					<0.000203	
7/6/2016		<0.000203	<0.000203	<0.000203	<0.000203		<0.000203
8/23/2016						<0.000203	<0.000203
9/6/2016	<0.000203	<0.000203		<0.000203	<0.000203		
9/7/2016			<0.000203			<0.000203	<0.000203
11/8/2016	<0.000203				<0.000203	<0.000203	<0.000203
11/9/2016		<0.000203	<0.000203	<0.000203			
1/3/2017						<0.000203	<0.000203
2/20/2017							<0.000203
2/21/2017		<0.000203	<0.000203	<0.000203		<0.000203	
2/22/2017	<0.000203				<0.000203		
5/31/2017	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
7/5/2017	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/5/2018	<0.000203			<0.000203	<0.000203		
2/6/2018		<0.000203	<0.000203			<0.000203	
2/7/2018							<0.000203
6/12/2018	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
10/23/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
10/24/2018		<0.000203	<0.000203				
5/21/2019	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203		
5/22/2019						<0.000203	<0.000203
9/3/2019		<0.000203	<0.000203				
9/4/2019	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
2/12/2020	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
9/8/2020		<0.000203					
9/9/2020	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
4/13/2021	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
10/4/2021	<0.000203				<0.000203	<0.000203	
10/5/2021		8E-05 (J)	<0.000203	<0.000203			
10/6/2021							<0.000203
4/12/2022							<0.000203
4/13/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	
8/16/2022					<0.000203	<0.000203	<0.000203
8/17/2022		0.000143 (J)	<0.000203				
8/18/2022	<0.000203			<0.000203			



# Time Series

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...
3/23/2016			14.8	70.2		
3/24/2016	36.9	90.3			79.9	
5/10/2016	37.9			65.6	77.6	
5/11/2016		91.1	11.5			
7/5/2016	35.3					50.8
7/6/2016		90.7	10.4	58.2	72	10.7
8/23/2016						51.7 7.34
9/6/2016	34.8	94.5		62.3	81.6	
9/7/2016			9.73			48.4 7.86
11/8/2016	34.3				83.8	50.7 8.94
11/9/2016		92.9	8.07	62.7		
1/3/2017						55.4 9.21
2/20/2017						8.53
2/21/2017		93.1	13.2	69.9		48
2/22/2017	35.9				86.4	
5/31/2017	34.3	86.6	8.56	66.5	84.1	45.4 7.02
7/5/2017	35.5	91.5	11.9	66.9	89.5	45.7 8.08
9/5/2017						48.5 7.44
9/7/2017	36.7	99	9.2	72.9	93.2	
6/12/2018	42.2	101	11.5	69.9	101	45.2 7.37
10/23/2018	38.9			64.3	97.6	44.4 5.94
10/24/2018		104	7.73			
5/21/2019	47.8	101	11.7	77.9	106	
5/22/2019						47.1 6.34
9/3/2019		102	8.9			
9/4/2019	41.4			74.2	93.7	47.4 6.07
2/12/2020	44.1	99.2	13.1	77.8	93.1	57.3 5.62
9/8/2020		99.9				
9/9/2020	44.5		9.3	77	88.7	46.7 4.73
4/13/2021	44	97.1	12.3	81.6	89.8	48.4 5.17
10/4/2021	45.4				92.2	48
10/5/2021		108	13.8	87.9		
10/6/2021						4.62
4/12/2022						4.59
4/13/2022	47.5	107	15	88	91.8	58.9
8/16/2022					107	52.099998 4.13
8/17/2022		118	12.6			
8/18/2022	53.5			110		





# Time Series

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016			2.64	4.43			
3/24/2016	3.35	2.78			3.16		
5/10/2016	3.06			3.38	3.02		
5/11/2016		2.62	3.02				
7/5/2016	2.9					3.86	
7/6/2016		2.53	4.01	2.62	3.1		3.78
8/23/2016						4.69	3.47
9/6/2016	2.54	2.51		2.65	3.31		
9/7/2016			4.51			4.6	3.4
11/8/2016	2.34				3.32	4.68	3.29
11/9/2016		2.67	3.74	2.55			
1/3/2017						5.25	3.11
2/20/2017							2.7
2/21/2017		3.4	4.1	4.7		4.3	
2/22/2017	2.9				4.8		
5/31/2017	2.7	3.6	5.3	4.1	4	4.2	2.3
7/5/2017	2.2	2.7	4.6	3.2	3.6	3.4	2
9/5/2017						4.5	<2 (U*)
9/7/2017	<2 (U*)	<2 (U*)	6.5	<2 (U*)	4.5		
6/12/2018	2.4	2.8	8.8	3.1	3.5	3.6	2
10/23/2018	2.1			2.1	3.5	3.4	1.5 (J)
10/24/2018		2.9	7.2				
5/21/2019	2.6	2.98	10.4	3.02	3.3		
5/22/2019						2.89	1.75
9/3/2019		2.84	7.1				
9/4/2019	2.39			2.73	3.33	2.88	1.95
2/12/2020	2.36	2.86	7.16	4.21	4.1	2.4	1.8
9/8/2020		2.8					
9/9/2020	2.49		6.27	2.8	3.4	2.49	1.95
4/13/2021	2.54	3.07	9.8	3.97	3.56	2.56	1.86
10/4/2021	2.58				3.37	2.5	
10/5/2021		3.04	13.8	3.69			
10/6/2021							2.07
4/12/2022							1.88
4/13/2022	2.17	2.77	19.6	3.76	3.01	2.42	
8/16/2022					3.47	2.54	2.27
8/17/2022		3.11	19.5				
8/18/2022	2.3			3.53			



# Time Series

Constituent: Chromium (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.001015	<0.001015			
3/24/2016	<0.001015	<0.001015			<0.001015		
5/10/2016	<0.001015			<0.001015	<0.001015		
5/11/2016		<0.001015	<0.001015				
7/5/2016	<0.001015					<0.001015	
7/6/2016		<0.001015	<0.001015	<0.001015	<0.001015		<0.001015
8/23/2016						<0.001015	<0.001015
9/6/2016	<0.001015	<0.001015		<0.001015	<0.001015		
9/7/2016			<0.001015			<0.001015	<0.001015
11/8/2016	<0.001015				<0.001015	<0.001015	<0.001015
11/9/2016		<0.001015	<0.001015	<0.001015			
1/3/2017						<0.001015	<0.001015
2/20/2017							<0.001015
2/21/2017		<0.001015	<0.001015	<0.001015		<0.001015	
2/22/2017	<0.001015				<0.001015		
5/31/2017	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
7/5/2017	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/5/2018	<0.001015			<0.001015	<0.001015		
2/6/2018		<0.001015	<0.001015			<0.001015	
2/7/2018							<0.001015
6/12/2018	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
10/23/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
10/24/2018		<0.001015	<0.001015				
5/21/2019	<0.001015	<0.001015	<0.001015	<0.001015	0.002 (J)		
5/22/2019						<0.001015	<0.001015
9/3/2019		<0.001015	<0.001015				
9/4/2019	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
2/12/2020	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
9/8/2020		<0.001015					
9/9/2020	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
4/13/2021	<0.001015	<0.001015	<0.001015	<0.001015	0.000518 (J)	0.000697 (J)	0.000375 (J)
10/4/2021	0.00021 (J)				0.00055 (J)	0.00065 (J)	
10/5/2021		0.00023 (J)	0.0003 (J)	0.00029 (J)			
10/6/2021							<0.001015
4/12/2022							0.00023 (J)
4/13/2022	<0.001015	<0.001015	<0.001015	0.00021 (J)	0.00052 (J)	0.0007 (J)	
8/16/2022					0.000444 (J)	0.000574 (J)	0.000374 (J)
8/17/2022		0.000266 (J)	<0.001015				
8/18/2022	<0.001015			<0.001015			



# Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/3/2022 2:46 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			0.00454 (J)	<0.000203			
3/24/2016	<0.000203	<0.000203			0.00662 (J)		
5/10/2016	<0.000203			<0.000203	0.00549 (J)		
5/11/2016		<0.000203	0.00407 (J)				
7/5/2016	<0.000203					<0.000203	
7/6/2016		<0.000203	0.00654 (J)	<0.000203	0.00537 (J)		0.00313 (J)
8/23/2016						<0.000203	<0.000203
9/6/2016	<0.000203	<0.000203		<0.000203	0.00568 (J)		
9/7/2016			0.00737 (J)			<0.000203	<0.000203
11/8/2016	<0.000203				0.00388 (J)	<0.000203	<0.000203
11/9/2016		<0.000203	0.00732 (J)	<0.000203			
1/3/2017						<0.000203	<0.000203
2/20/2017							<0.000203
2/21/2017		<0.000203	0.00315 (J)	<0.000203		<0.000203	
2/22/2017	<0.000203				0.00412 (J)		
5/31/2017	<0.000203	<0.000203	0.0023 (J)	<0.000203	<0.000203	<0.000203	<0.000203
7/5/2017	<0.000203	<0.000203	0.00303 (J)	<0.000203	<0.000203	<0.000203	<0.000203
2/5/2018	<0.000203			<0.000203	<0.000203		
2/6/2018		<0.000203	0.00324 (J)			<0.000203	
2/7/2018							<0.000203
6/12/2018	<0.000203	<0.000203	0.00251 (J)	<0.000203	<0.000203	<0.000203	<0.000203
10/23/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
10/24/2018		<0.000203	0.00286 (J)				
5/21/2019	<0.000203	<0.000203	0.00245 (J)	<0.000203	0.0578 (o)		
5/22/2019						<0.000203	<0.000203
9/3/2019		<0.000203	0.00298 (J)				
9/4/2019	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
2/12/2020	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
9/8/2020		<0.000203					
9/9/2020	<0.000203		0.00256 (J)	<0.000203	<0.000203	<0.000203	<0.000203
4/13/2021	<0.000203	<0.000203	0.00212	0.000218	0.000158 (J)	<0.000203	0.00046
10/4/2021	<0.000203				0.0001 (J)	<0.000203	
10/5/2021		<0.000203	0.00217	0.00042			
10/6/2021							0.0005
4/12/2022							0.00066
4/13/2022	<0.000203	<0.000203	0.00324	0.00016 (J)	<0.000203	<0.000203	
8/16/2022					8.8E-05 (J)	0.000124 (J)	0.000587
8/17/2022		<0.000203	0.00278				
8/18/2022	<0.000203			0.000296			



# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<3	<3			
3/24/2016	<3	<3			<3		
5/10/2016	0.904			0.0311 (U)	-0.0573 (U)		
5/11/2016		0.197 (U)	0.0833 (U)				
7/5/2016	0.971					0.385 (U)	
7/6/2016		-0.0714 (U)	0.0827 (U)	0.359 (U)	0.607		0.563
8/23/2016						0.411 (U)	0.352 (U)
9/6/2016	1.09	0.59 (U)		1.03 (U)	0.47 (U)		
9/7/2016			2.13			0.88	1.08
11/8/2016	1.13				0.177 (U)	0.791	0.908
11/9/2016		0.621 (U)	0.419 (U)	1.22			
1/3/2017						0.412 (U)	0.661
2/20/2017							0.155 (U)
2/21/2017		1.01	1.19	0.0581 (U)		0.746	
2/22/2017					0.783		
3/1/2017	0.736						
5/31/2017	0.961	0.191 (U)	0.215 (U)	0.186 (U)	0.153 (U)	0.115 (U)	-0.105 (U)
7/5/2017	1.1	0.166 (U)	0.289 (U)	0.245 (U)	0.444	0.152 (U)	0.372
2/5/2018	0.596			0.321 (U)	-0.0362 (U)		
2/6/2018		0.275 (U)	-0.183 (U)			0.308 (U)	
2/7/2018							0.0874 (U)
6/12/2018	0.89	0.218 (U)	0.569	0.321 (U)	-0.0382 (U)	0.672	0.446
10/23/2018	1.14			0.723	1.04	0.248 (U)	0.829
10/24/2018		1.4	0.898				
5/21/2019	1.38	5.12 (U)	0.0995 (U)	0.376 (U)	0.503 (U)		
5/22/2019						0.24 (U)	0.588
9/3/2019		0.793	3.47				
9/4/2019	2.39			0.534	3.92	2.02	1.06
2/12/2020	1.17	0.13 (U)	0.0433 (U)	0.836	0.799	0.79	0.297 (U)
9/8/2020		0.65 (U)					
9/9/2020	1.02		0.798	1.88	0.27 (U)	0.453 (U)	0.258 (U)
4/13/2021	0.909 (U)	0.531 (U)	0.589 (U)	0.592 (U)	0.667 (U)	0.788 (U)	0.452 (U)
10/4/2021	1.43				0.231 (U)	0.573 (U)	
10/5/2021		0.269 (U)	0.524 (U)	1.42			
10/6/2021							1.33
4/12/2022							0.336 (U)
4/13/2022	1.31	0.551 (U)	0.453 (U)	0.257 (U)	0.357 (U)	0.127 (U)	
8/16/2022					0.98	0.753 (U)	0.703 (U)
8/17/2022		0.934 (U)	0.33 (U)				
8/18/2022	0.975			0.607 (U)			





# Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			0.02 (J)	0.058 (J)			
3/24/2016	0.325	0.02 (J)			0.039 (J)		
5/10/2016	0.33			0.095 (J)	0.085 (J)		
5/11/2016		0.062 (J)	0.063 (J)				
7/5/2016	0.325					0.072 (J)	
7/6/2016		0.051 (J)	0.053 (J)	0.069 (J)	0.075 (J)		0.062 (J)
8/23/2016						0.066 (J)	0.045 (J)
9/6/2016	0.315	0.037 (J)		0.055 (J)	0.058 (J)		
9/7/2016			0.041 (J)			0.062 (J)	0.042 (J)
11/8/2016	0.227 (J)				0.3 (U)	<0.125	<0.125
11/9/2016		0.3 (U)	<0.125	<0.125			
1/3/2017						<0.125	<0.125
2/20/2017							0.1
2/21/2017		0.1	0.1	0.05 (J)		0.1	
2/22/2017	0.34				0.04 (J)		
5/31/2017	0.3	0.1	0.1	0.06 (J)	0.04 (J)	0.06 (J)	0.1
7/5/2017	0.3	<0.125	<0.125	0.05 (J)	0.04 (J)	0.04 (J)	<0.125
9/5/2017						0.06 (J)	<0.125
9/7/2017	0.37	<0.125	0.04 (J)	0.06 (J)	0.05 (J)		
2/5/2018	0.37			0.08 (J)	0.04 (J)		
2/6/2018		<0.125	<0.125			0.06 (J)	
2/7/2018							<0.125
6/12/2018	0.32	<0.125	<0.125	0.06 (J)	0.04 (J)	0.05 (J)	<0.125
10/23/2018	0.39			0.06 (J)	0.05 (J)	0.07 (J)	<0.125
10/24/2018		<0.125	<0.125				
5/21/2019	0.264	<0.125	<0.125	0.0649 (J)	0.0595 (J)		
5/22/2019						0.0601 (J)	<0.125
9/3/2019		<0.125	<0.125				
9/4/2019	0.33			0.0547 (J)	0.0555 (J)	0.0703 (J)	<0.125
2/12/2020	0.301	<0.125	<0.125	0.0586 (J)	<0.125	<0.125	<0.125
9/8/2020		0.0617 (J)					
9/9/2020	0.313		<0.125	0.068 (J)	0.0655 (J)	0.0847 (J)	<0.125
4/13/2021	0.29	<0.125	<0.125	<0.125	0.0633 (J)	<0.125	<0.125
10/4/2021	0.376				0.0748 (J)	0.0838 (J)	
10/5/2021		<0.125	<0.125	<0.125			
10/6/2021							<0.125
4/12/2022							<0.125
4/13/2022	0.307	<0.125	<0.125	<0.125	<0.125	<0.125	
8/16/2022					0.0614 (J)	<0.125	<0.125
8/17/2022		<0.125	<0.125				
8/18/2022	0.327			<0.125			



# Time Series

Constituent: Lead (mg/L) Analysis Run 10/3/2022 2:46 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.000203	<0.000203			
3/24/2016	<0.000203	<0.000203			<0.000203		
5/10/2016	<0.000203			<0.000203	<0.000203		
5/11/2016		<0.000203	<0.000203				
7/5/2016	<0.000203					<0.000203	
7/6/2016		<0.000203	<0.000203	<0.000203	<0.000203		<0.000203
8/23/2016						<0.000203	<0.000203
9/6/2016	<0.000203	<0.000203		<0.000203	<0.000203		
9/7/2016			<0.000203			<0.000203	<0.000203
11/8/2016	<0.000203				<0.000203	<0.000203	<0.000203
11/9/2016		<0.000203	<0.000203	<0.000203			
1/3/2017						<0.000203	<0.000203
2/20/2017							<0.000203
2/21/2017		<0.000203	<0.000203	<0.000203		<0.000203	
2/22/2017	<0.000203				<0.000203		
5/31/2017	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
7/5/2017	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/5/2018	<0.000203			<0.000203	<0.000203		
2/6/2018		<0.000203	<0.000203			<0.000203	
2/7/2018							<0.000203
6/12/2018	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
10/23/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
10/24/2018		<0.000203	<0.000203				
5/21/2019	<0.000203	<0.000203	<0.000203	<0.000203	0.00228 (J)		
5/22/2019						<0.000203	<0.000203
9/3/2019		<0.000203	<0.000203				
9/4/2019	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
2/12/2020	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
9/8/2020		<0.000203					
9/9/2020	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
4/13/2021	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
10/4/2021	<0.000203				<0.000203	<0.000203	
10/5/2021		<0.000203	<0.000203	<0.000203			
10/6/2021							<0.000203
4/12/2022							0.00023
4/13/2022	<0.000203	<0.000203	0.00011 (J)	<0.000203	<0.000203	<0.000203	
8/16/2022					<0.000203	<0.000203	0.000115 (J)
8/17/2022		<0.000203	7.8E-05 (J)				
8/18/2022	<0.000203			<0.000203			



# Time Series

Constituent: Lithium (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.02	<0.02			
3/24/2016	<0.02	<0.02			<0.02		
5/10/2016	<0.02			<0.02	<0.02		
5/11/2016		<0.02	<0.02				
7/5/2016	<0.02					<0.02	
7/6/2016		<0.02	<0.02	<0.02	<0.02		<0.02
8/23/2016						<0.02	<0.02
9/6/2016	<0.02	<0.02		<0.02	<0.02		
9/7/2016			<0.02			<0.02	<0.02
11/8/2016	<0.02				<0.02	<0.02	<0.02
11/9/2016		<0.02	<0.02	<0.02			
1/3/2017						<0.02	<0.02
2/20/2017							<0.02
2/21/2017		<0.02	<0.02	<0.02		<0.02	
2/22/2017	<0.02				<0.02		
5/31/2017	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
7/5/2017	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2/5/2018	<0.02			<0.02	<0.02		
2/6/2018		<0.02	<0.02			<0.02	
2/7/2018							<0.02
6/12/2018	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
10/23/2018	<0.02			<0.02	<0.02	<0.02	<0.02
10/24/2018		<0.02	<0.02				
5/21/2019	<0.02	<0.02	<0.02	<0.02	<0.02		
5/22/2019						<0.02	<0.02
9/3/2019		<0.02	<0.02				
9/4/2019	<0.02			<0.02	<0.02	<0.02	<0.02
2/12/2020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
9/8/2020		<0.02					
9/9/2020	0.0101 (J)		<0.02	<0.02	<0.02	<0.02	<0.02
4/13/2021	0.00953 (J)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
10/4/2021	0.00963 (J)				<0.02	<0.02	
10/5/2021		<0.02	<0.02	<0.02			
10/6/2021							<0.02
4/12/2022							<0.02
4/13/2022	0.00966 (J)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
8/16/2022					<0.02	<0.02	<0.02
8/17/2022		<0.02	<0.02				
8/18/2022	0.00965 (J)			<0.02			

# Time Series

Constituent: Lithium (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	<0.02	<0.02	<0.02	<0.02	<0.02		<0.02
3/24/2016						<0.02	
5/10/2016	<0.02	<0.02					
5/11/2016			<0.02	<0.02	<0.02	<0.02	<0.02
7/5/2016	<0.02						
7/6/2016		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
9/6/2016	<0.02		<0.02	<0.02	<0.02	<0.02	
9/7/2016		<0.02					<0.02
11/8/2016	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2/20/2017		<0.02	<0.02	<0.02	<0.02	<0.02	
2/21/2017	<0.02						<0.02
5/30/2017			<0.02	<0.02		<0.02	<0.02
5/31/2017	<0.02	<0.02			<0.02		
7/5/2017	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2/5/2018	<0.02						
2/6/2018		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
6/11/2018			<0.02	<0.02	<0.02		
6/12/2018	<0.02	<0.02				<0.02	<0.02
10/22/2018	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02
10/23/2018		<0.02					
5/20/2019	<0.02		<0.02	<0.02	<0.02		
5/21/2019						<0.02	<0.02
5/22/2019		<0.02					
9/3/2019						<0.02	<0.02
9/4/2019	<0.02	<0.02	<0.02	<0.02	<0.02		
2/11/2020			<0.02	<0.02	<0.02		
2/12/2020	<0.02	<0.02				<0.02	<0.02
9/8/2020			<0.02	<0.02			<0.02
9/9/2020	<0.02	<0.02			<0.02	<0.02	
4/13/2021	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
10/4/2021	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
10/5/2021							<0.02
4/12/2022	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
8/16/2022	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
8/17/2022							<0.02

# Time Series

Constituent: Mercury (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.0005	<0.0005			
3/24/2016	<0.0005	<0.0005			<0.0005		
5/10/2016	<0.0005			<0.0005	<0.0005		
5/11/2016		<0.0005	<0.0005				
7/5/2016	<0.0005					<0.0005	
7/6/2016		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
8/23/2016						<0.0005	<0.0005
9/6/2016	<0.0005	<0.0005		<0.0005	<0.0005		
9/7/2016			<0.0005			<0.0005	<0.0005
11/8/2016	<0.0005				<0.0005	<0.0005	<0.0005
11/9/2016		<0.0005	<0.0005	<0.0005			
1/3/2017						<0.0005	<0.0005
2/20/2017							<0.0005
2/21/2017		<0.0005	<0.0005	<0.0005		<0.0005	
2/22/2017	<0.0005				<0.0005		
5/31/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
7/5/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/5/2018	<0.0005			<0.0005	<0.0005		
2/6/2018		<0.0005	<0.0005			<0.0005	
2/7/2018							<0.0005
6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10/23/2018	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005
10/24/2018		<0.0005	<0.0005				
5/21/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
5/22/2019						<0.0005	<0.0005
9/3/2019		<0.0005	<0.0005				
9/4/2019	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005
2/12/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
9/8/2020		<0.0005					
9/9/2020	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
4/13/2021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10/4/2021	<0.0005				<0.0005	<0.0005	
10/5/2021		<0.0005	<0.0005	<0.0005			
10/6/2021							<0.0005
4/12/2022							<0.0005
4/13/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/16/2022					<0.0005	<0.0005	<0.0005
8/17/2022		<0.0005	<0.0005				
8/18/2022	<0.0005			<0.0005			





# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.000203	<0.000203			
3/24/2016	0.0241	<0.000203			<0.000203		
5/10/2016	0.0239			<0.000203	<0.000203		
5/11/2016		<0.000203	<0.000203				
7/5/2016	0.0176					<0.000203	
7/6/2016		<0.000203	<0.000203	<0.000203	<0.000203		<0.000203
8/23/2016						<0.000203	<0.000203
9/6/2016	0.0138	<0.000203		<0.000203	<0.000203		
9/7/2016			<0.000203			<0.000203	<0.000203
11/8/2016	0.0102				<0.000203	<0.000203	<0.000203
11/9/2016		<0.000203	<0.000203	<0.000203			
1/3/2017						<0.000203	<0.000203
2/20/2017							<0.000203
2/21/2017		<0.000203	<0.000203	<0.000203		<0.000203	
2/22/2017	0.0102				<0.000203		
5/31/2017	0.00805 (J)	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
7/5/2017	0.009 (J)	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/5/2018	0.00908 (J)			<0.000203	<0.000203		
2/6/2018		<0.000203	<0.000203			<0.000203	
2/7/2018							<0.000203
6/12/2018	0.00655 (J)	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
10/23/2018	0.006 (J)			<0.000203	<0.000203	<0.000203	<0.000203
10/24/2018		<0.000203	<0.000203				
5/21/2019	0.00504 (J)	<0.000203	<0.000203	<0.000203	<0.000203		
5/22/2019						<0.000203	<0.000203
9/3/2019		<0.000203	<0.000203				
9/4/2019	0.00504 (J)			<0.000203	<0.000203	<0.000203	<0.000203
2/12/2020	0.00448 (J)	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
9/8/2020		<0.000203					
9/9/2020	0.00405 (J)		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
4/13/2021	0.00353	<0.000203	<0.000203	0.000298	0.000175 (J)	0.000334	<0.000203
10/4/2021	0.00372				0.00016 (J)	0.00046	
10/5/2021		<0.000203	<0.000203	0.00033			
10/6/2021							<0.000203
4/12/2022							<0.000203
4/13/2022	0.0033	<0.000203	<0.000203	0.00031	0.00021	0.00025	
8/16/2022					0.000189 (J)	0.000334	<0.000203
8/17/2022		<0.000203	<0.000203				
8/18/2022	0.00295			0.000207			



# Time Series

Constituent: pH (pH) Analysis Run 10/3/2022 2:46 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016			6.26	7.28			
3/24/2016	7.7	6.95			7.14		
5/10/2016	7.67			7.19	7.17		
5/11/2016		7.07	6.04				
7/5/2016	7.68					7.44	
7/6/2016		7.13	6	7.29	7.19		6.1
8/23/2016						7.47	5.87
9/6/2016	7.8	7.1		7.29	7.18		
9/7/2016			6.1			7.51	5.92
11/8/2016	7.74				7.18	7.37	5.91
11/9/2016		7.1	5.85	7.29			
1/3/2017						7.37	5.93
2/20/2017							5.91
2/21/2017		7	5.99	7.1		7.41	
2/22/2017	7.61				7.02		
5/31/2017	7.7	7.01	6.03	7.16	7.07	7.47	6
7/5/2017	7.66	7.07	6.13	7.08	7	7.5	6
9/5/2017						7.39	5.9
9/7/2017	7.7	7.01	6.17	7.17	7.02		
2/5/2018	7.78			7.22	7.12		
2/6/2018		7.09	6.17			7.47	
2/7/2018							5.86
6/12/2018	7.62	7.07	6.13	7.19	7.09	7.53	6.05
10/23/2018	7.65			7.22	7.09	7.4	5.84
10/24/2018		7.14	6.09				
5/21/2019	7.5	6.98	5.97	7.1	7.05		
5/22/2019						7.43	5.81
9/3/2019		6.67	5.12				
9/4/2019	7.4			7.24	6.71	7.45	5.67
2/12/2020	7.66	7.03	6	7.14	7.09	7.47	5.72
9/8/2020		5.9					
9/9/2020	7.6		5.67	6.77	6.95	7.32	5.71
4/13/2021	7.7	7.22	5.46	6.61	7.17	7.33	5.84
10/4/2021	7.33				6.95	7.21	
10/5/2021		7.12	6.01	7.25			
10/6/2021							5.64
4/12/2022							5.25
4/13/2022	7.5	6.85	5.29	6.74	6.84	7.4	
8/16/2022					6.92	6.96	5.37
8/17/2022		6.97	5.6				
8/18/2022	7.46			6.82			



# Time Series

Constituent: Selenium (mg/L) Analysis Run 10/3/2022 2:46 PM

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.001015	<0.001015			
3/24/2016	<0.001015	<0.001015			<0.001015		
5/10/2016	<0.001015			<0.001015	<0.001015		
5/11/2016		<0.001015	<0.001015				
7/5/2016	<0.001015					<0.001015	
7/6/2016		<0.001015	<0.001015	<0.001015	<0.001015		<0.001015
8/23/2016						<0.001015	<0.001015
9/6/2016	<0.001015	<0.001015		<0.001015	<0.001015		
9/7/2016			<0.001015			<0.001015	<0.001015
11/8/2016	<0.001015				<0.001015	<0.001015	<0.001015
11/9/2016		<0.001015	<0.001015	<0.001015			
1/3/2017						<0.001015	<0.001015
2/20/2017							<0.001015
2/21/2017		<0.001015	<0.001015	<0.001015		<0.001015	
2/22/2017	<0.001015				<0.001015		
5/31/2017	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
7/5/2017	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/5/2018	<0.001015			<0.001015	<0.001015		
2/6/2018		<0.001015	<0.001015			<0.001015	
2/7/2018							<0.001015
6/12/2018	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
10/23/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
10/24/2018		<0.001015	<0.001015				
5/21/2019	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015		
5/22/2019						<0.001015	<0.001015
9/3/2019		<0.001015	<0.001015				
9/4/2019	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
2/12/2020	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
9/8/2020		<0.001015					
9/9/2020	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
4/13/2021	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
10/4/2021	<0.001015				<0.001015	<0.001015	
10/5/2021		<0.001015	<0.001015	<0.001015			
10/6/2021							<0.001015
4/12/2022							<0.001015
4/13/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
8/16/2022					<0.001015	<0.001015	<0.001015
8/17/2022		<0.001015	<0.001015				
8/18/2022	<0.001015			<0.001015			



# Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:46 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016			7.59	16.2			
3/24/2016	6.06	1.62			7.64		
5/10/2016	5.47			12.1	6.79		
5/11/2016		2.15	6.6				
7/5/2016	4.8					11.7	
7/6/2016		1.89	11.8	7.7	7.59		5.38
8/23/2016						13.7	4.23
9/6/2016	3.91	1.53		6.97	9.56		
9/7/2016			14.9			12.4	3.84
11/8/2016	2.95				8.87	12.9	3.23
11/9/2016		1.69	4.5	5.77			
1/3/2017						14.1	3
2/20/2017							3.1 (J)
2/21/2017		2.2 (J)	5.7	12		6.1	
2/22/2017	3.3 (J)				10		
5/31/2017	3.4 (J)	1.7 (J)	5.6	8.7	8	8	2.1 (J)
7/5/2017	3.4 (J)	<1	4.6 (J)	7.7	8.2	3.8 (J)	2 (J)
9/5/2017						6.8	2.2 (J)
9/7/2017	3.6 (J)	1.7 (J)	6.2	7	8.3		
6/12/2018	4.2 (J)	1.8 (J)	3.5 (J)	8.7	8.3	5	2.3 (J)
10/23/2018	3 (J)			4.8 (J)	6.7	5.4	<1
10/24/2018		<1	2.4 (J)				
5/21/2019	4.58	1.72	3.55	7.81	8.29		
5/22/2019						5.57	2.82
9/3/2019		1.73	2.83				
9/4/2019	4.82			6.25	8.18	6.37	2.3
2/12/2020	5.11	1.65	3.89	13.1	9.06	3.09	1.77
9/8/2020		1.62					
9/9/2020	3.97		3.01	5.85	7.89	5.26	2
4/13/2021	4.43	1.68	2.77	8.86	8.38	3.45	2.51
10/4/2021	4.08				7.18	3.78	
10/5/2021		1.8	2.86	8.02			
10/6/2021							2.15
4/12/2022							1.76 (J)
4/13/2022	4.24	1.68 (J)	2.73	8.25	7.27	2.44	
8/16/2022					8.54	4.71	3.73
8/17/2022		2.24	2.29				
8/18/2022	4.84			6.66			





# Time Series

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:46 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...
3/23/2016			56.7	237		
3/24/2016	203	239			244	
5/10/2016	204			226	247	
5/11/2016		257	54.7			
7/5/2016	188					194
7/6/2016		256	76	191	247	55.3
8/23/2016						208
9/6/2016	188	245		200	264	
9/7/2016			96			198
11/8/2016	197				173	205
11/9/2016		258	57.3	190		
1/3/2017						221
2/20/2017						55.3
2/21/2017		243	76.7	264		195
2/22/2017	165				260	
5/31/2017	244	252	75.3	242	277	220
7/5/2017	201	257	80	231	296	185
9/5/2017						202
9/7/2017	196	259	105	225	294	
6/12/2018	221	266	72	230	282	205
10/23/2018	195 (D)			201 (D)	279 (D)	204 (D)
10/24/2018		265 (D)	68 (D)			
5/21/2019	244	274	66	231	286	
5/22/2019						202
9/3/2019		260	51.3			35.3
9/4/2019	200			217	271	195
2/12/2020	219	259	66	256	282	189
9/8/2020		275				
9/9/2020	221		59.3	230	271	198
4/13/2021	237	273	66	260	286	191
10/4/2021	221				277	183
10/5/2021		293	92.7	255		
10/6/2021						<25
4/12/2022						27.3
4/13/2022	217	273	84	250	266	187
8/16/2022					264	162
8/17/2022		265	76			27.299999
8/18/2022	214			252		

# Time Series

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:46 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
3/23/2016	272	334	185	27.3	202		149
3/24/2016						179	
5/10/2016	283	349					
5/11/2016			176	<25	207	195	179
7/5/2016	294						
7/6/2016		316	203	<25	202	192	183
9/6/2016	295		180	<25	204	193	
9/7/2016		309					173
11/8/2016	310	302	187	<25	212	198	207
2/20/2017		297	205	30	251	195	
2/21/2017	280						153
5/30/2017			187	<25		184	158
5/31/2017	287	287			234		
7/5/2017	287	283	238	26	229	194	138
9/5/2017	280	284					
9/7/2017			269	<25	225	193	171
6/11/2018			312	<25	210		
6/12/2018	284	248				186	167
10/22/2018	278 (D)		292 (D)	<25 (D)	209 (D)	184 (D)	177 (D)
10/23/2018		215 (D)					
5/20/2019	286		398	27.3	218		
5/21/2019						185	176
5/22/2019		184					
9/3/2019						184	189
9/4/2019	297	225	388	<25	233		
2/11/2020			308	<25	241		
2/12/2020	276	250				182	153
9/8/2020			360	<25			187
9/9/2020	272	220			234	192	
4/13/2021	283	196	350	26	220	186	163
10/4/2021	287	168	379	32	232	203	
10/5/2021							170
4/12/2022	271	156	400	<25	214	176	155
8/16/2022	280	164	376	<25	212	162	
8/17/2022							179

# Time Series

Constituent: Thallium (mg/L) Analysis Run 10/3/2022 2:46 PM

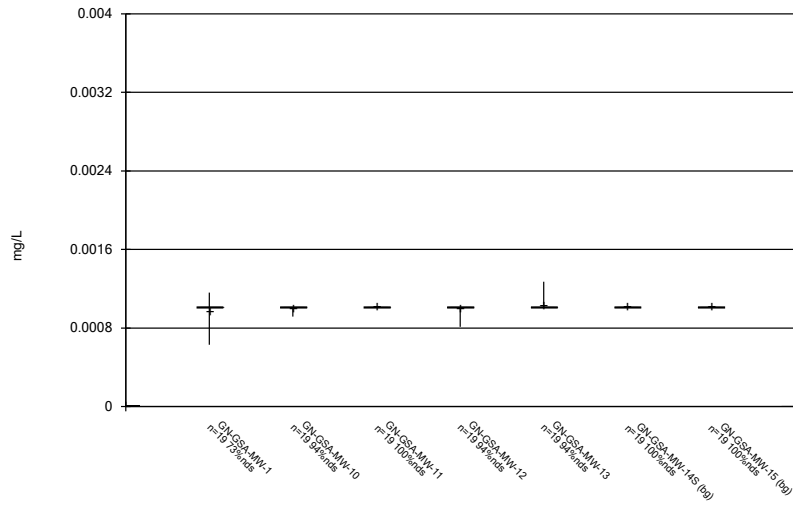
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-14S..	GN-GSA-MW-15 ...
3/23/2016			<0.000203	<0.000203			
3/24/2016	<0.000203	<0.000203			<0.000203		
5/10/2016	<0.000203			<0.000203	<0.000203		
5/11/2016		<0.000203	<0.000203				
7/5/2016	<0.000203					<0.000203	
7/6/2016		<0.000203	<0.000203	<0.000203	<0.000203		<0.000203
8/23/2016						<0.000203	<0.000203
9/6/2016	<0.000203	<0.000203		<0.000203	<0.000203		
9/7/2016			<0.000203			<0.000203	<0.000203
11/8/2016	<0.000203				<0.000203	<0.000203	<0.000203
11/9/2016		<0.000203	<0.000203	<0.000203			
1/3/2017						<0.000203	<0.000203
2/20/2017							<0.000203
2/21/2017		<0.000203	<0.000203	<0.000203		<0.000203	
2/22/2017	<0.000203				<0.000203		
5/31/2017	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
7/5/2017	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/5/2018	<0.000203			<0.000203	<0.000203		
2/6/2018		<0.000203	<0.000203			<0.000203	
2/7/2018							<0.000203
6/12/2018	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
10/23/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
10/24/2018		<0.000203	<0.000203				
5/21/2019	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203		
5/22/2019						<0.000203	<0.000203
9/3/2019		<0.000203	<0.000203				
9/4/2019	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
2/12/2020	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
9/8/2020		<0.000203					
9/9/2020	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
4/13/2021	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
10/4/2021	<0.000203				<0.000203	<0.000203	
10/5/2021		<0.000203	<0.000203	<0.000203			
10/6/2021							<0.000203
4/12/2022							<0.000203
4/13/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	
8/16/2022					<0.000203	<0.000203	<0.000203
8/17/2022		<0.000203	<0.000203				
8/18/2022	<0.000203			<0.000203			



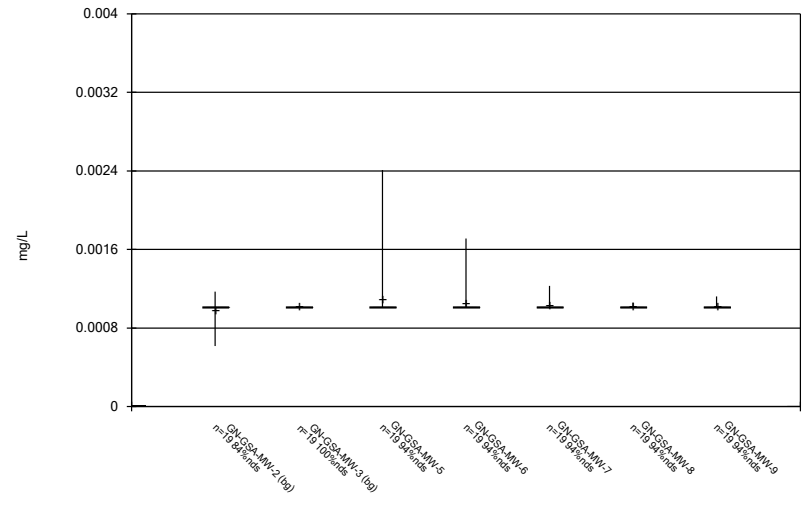
FIGURE B.

Box & Whiskers Plot



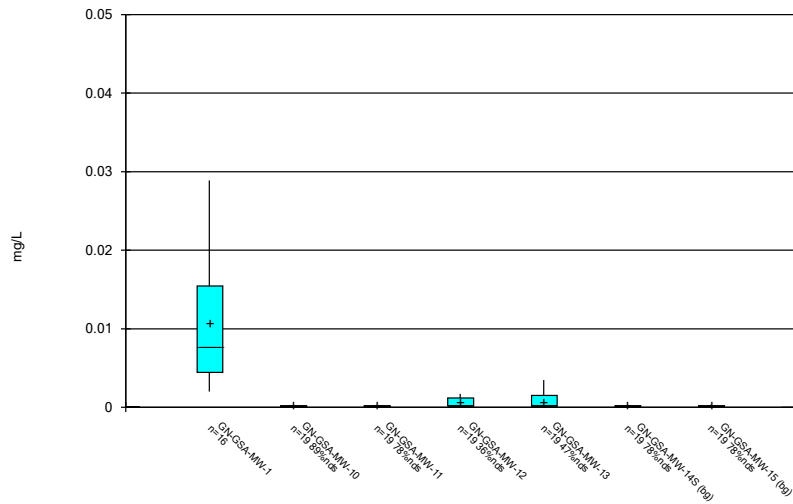
Constituent: Antimony Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



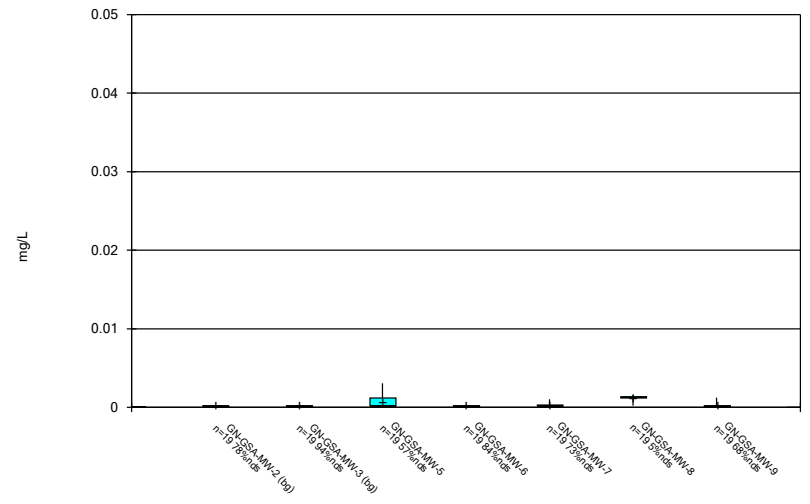
Constituent: Antimony Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



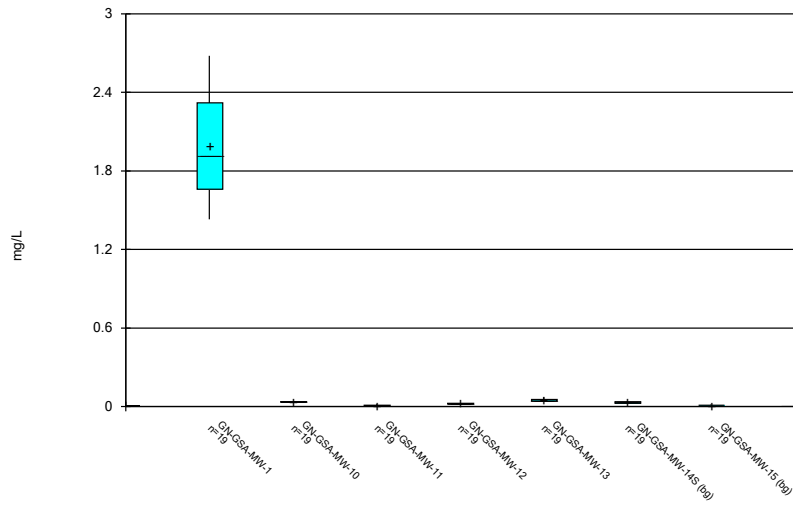
Constituent: Arsenic Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



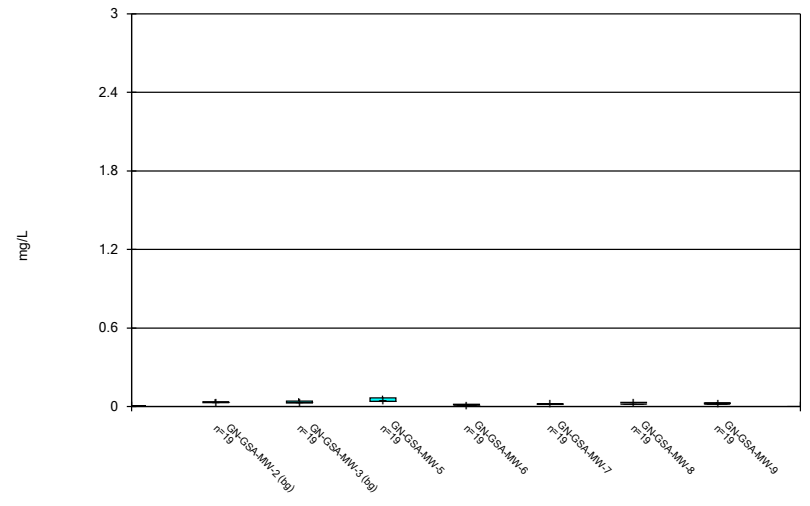
Constituent: Arsenic Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



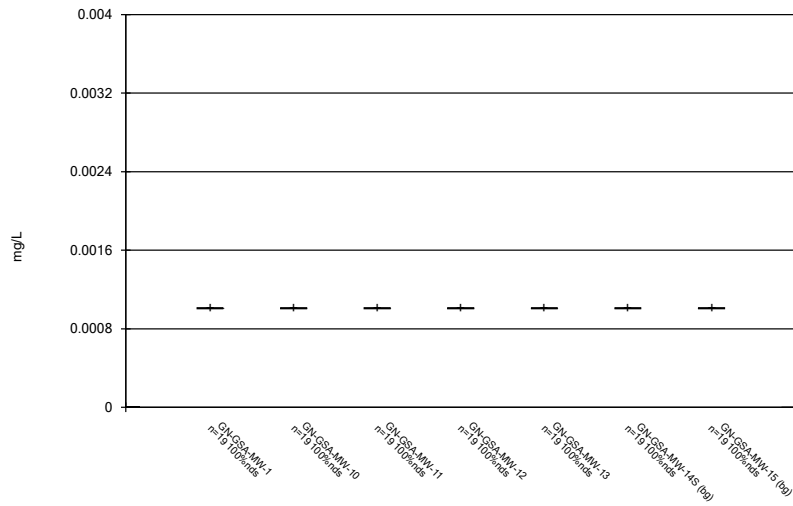
Constituent: Barium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



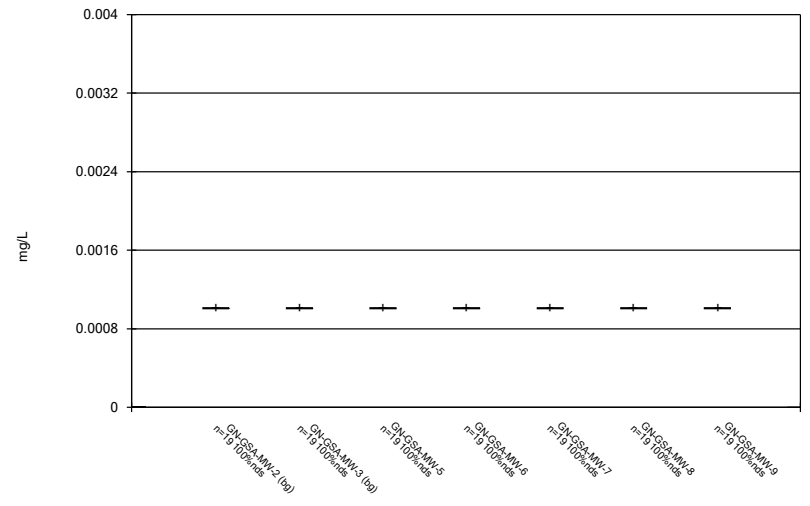
Constituent: Barium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

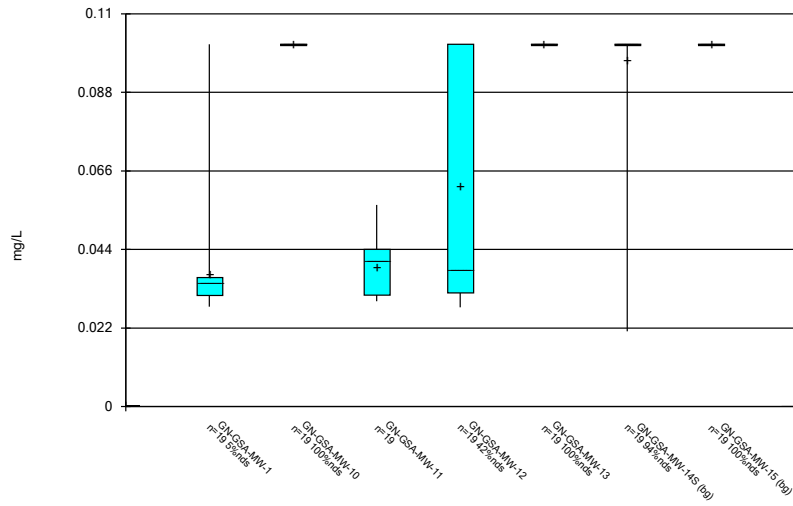
### Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

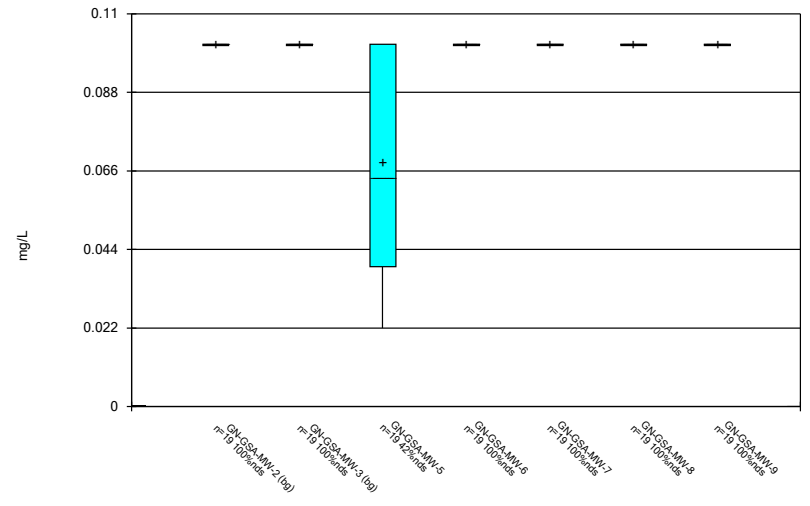


### Box & Whiskers Plot



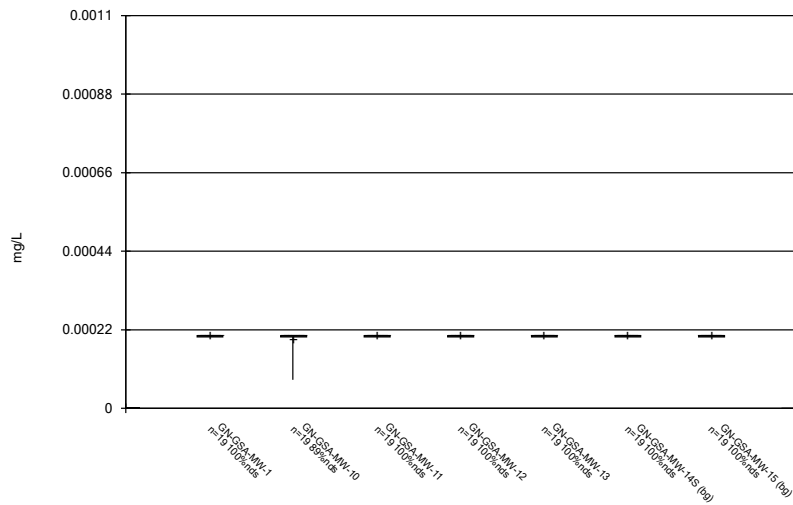
Constituent: Boron Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



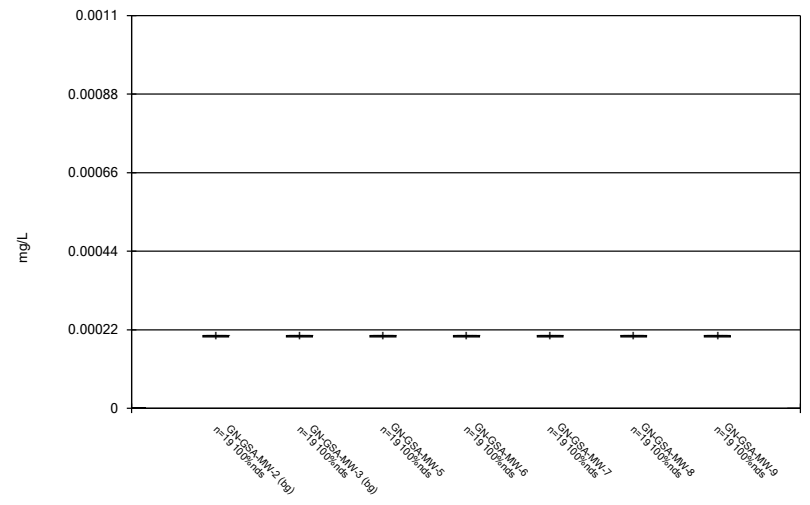
Constituent: Boron Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



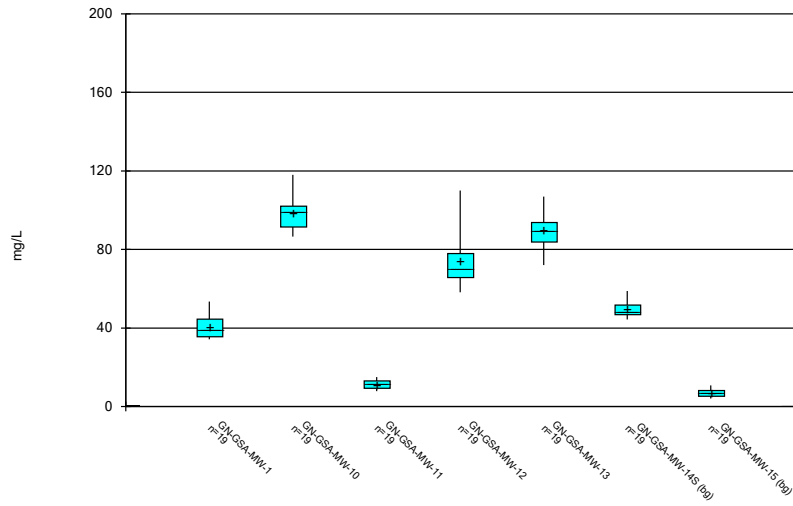
Constituent: Cadmium Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



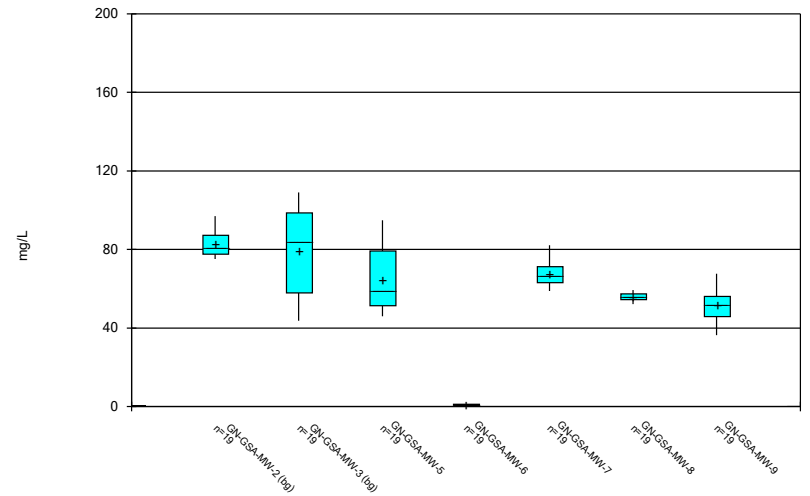
Constituent: Cadmium Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



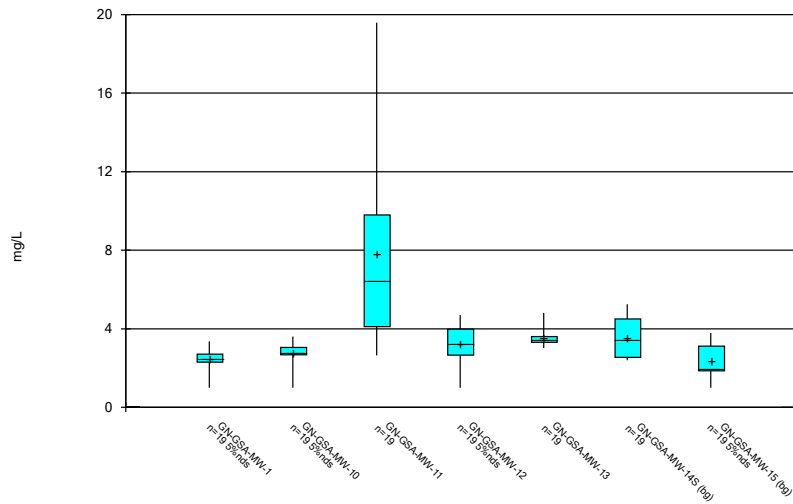
Constituent: Calcium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



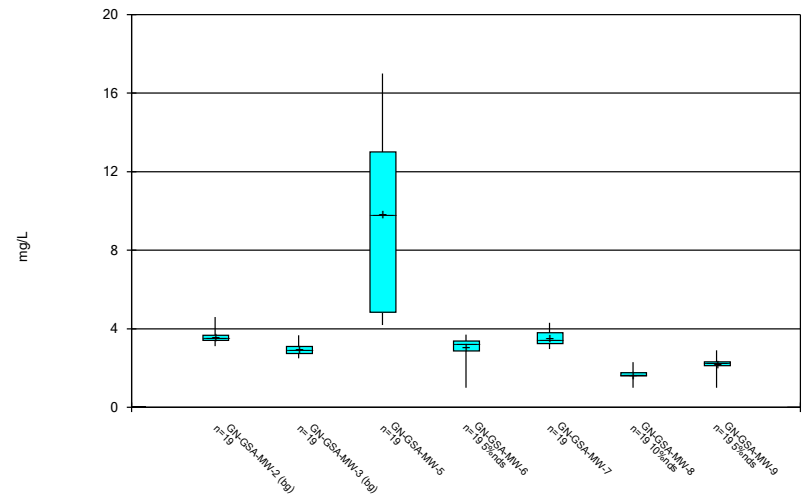
Constituent: Calcium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



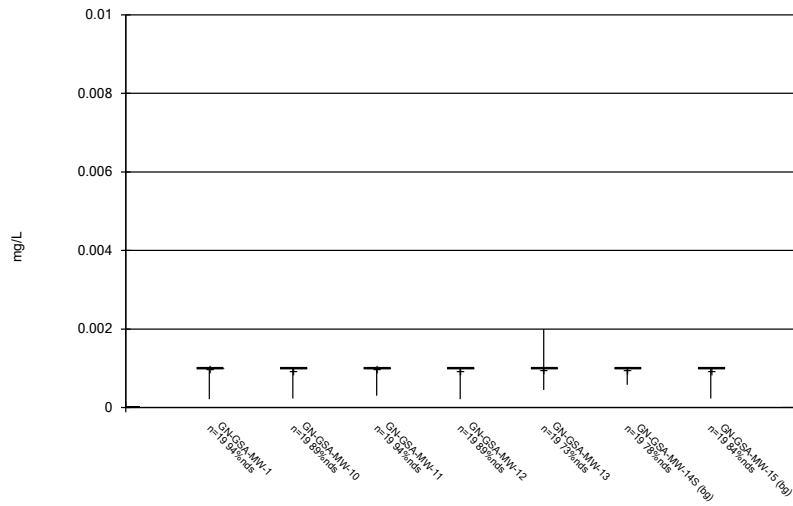
Constituent: Chloride Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Box & Whiskers Plot



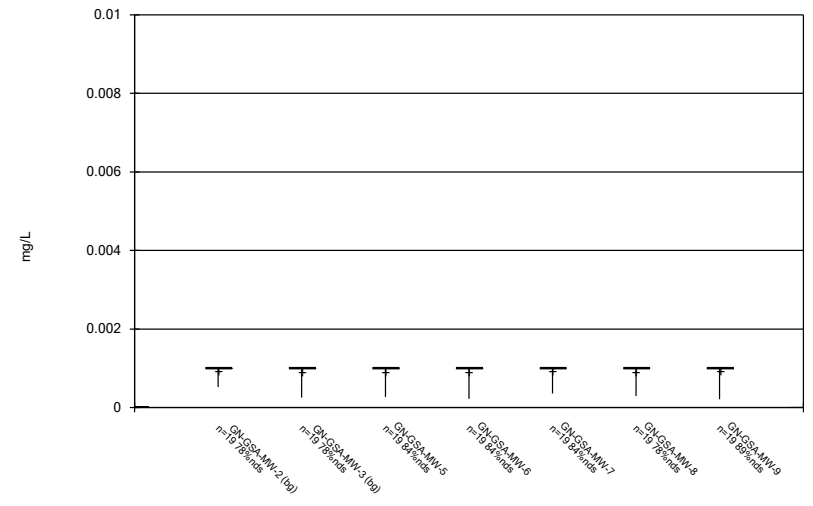
Constituent: Chloride Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



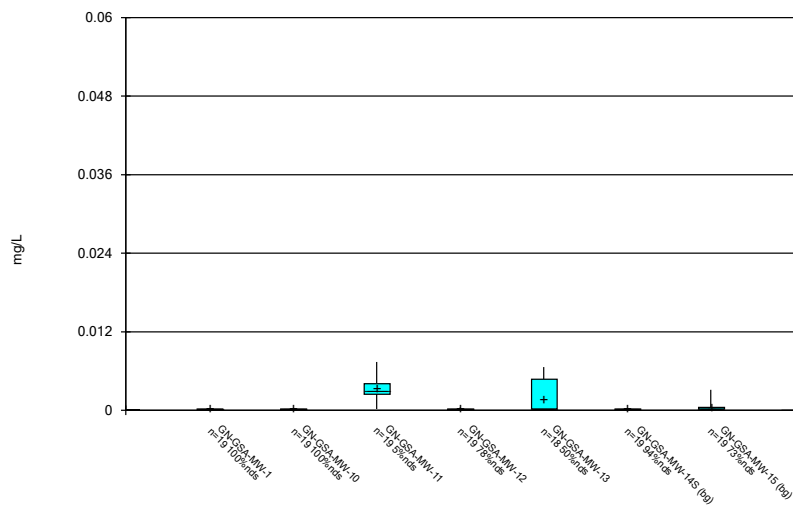
Constituent: Chromium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



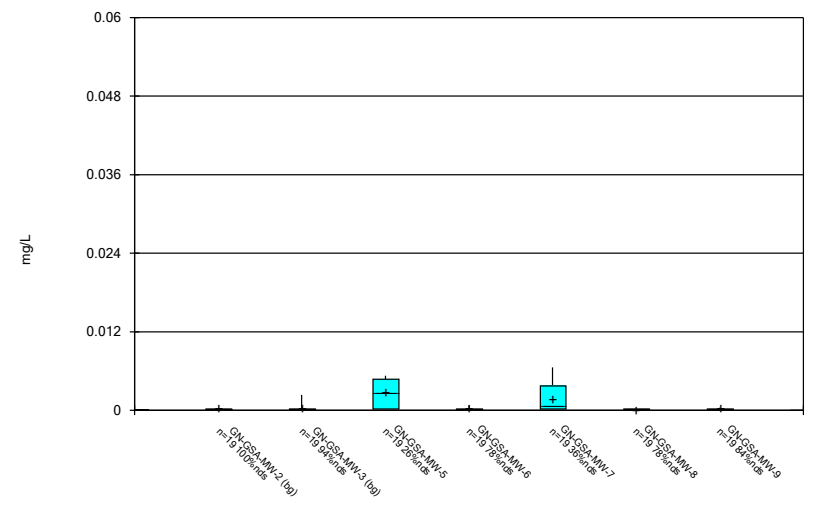
Constituent: Chromium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



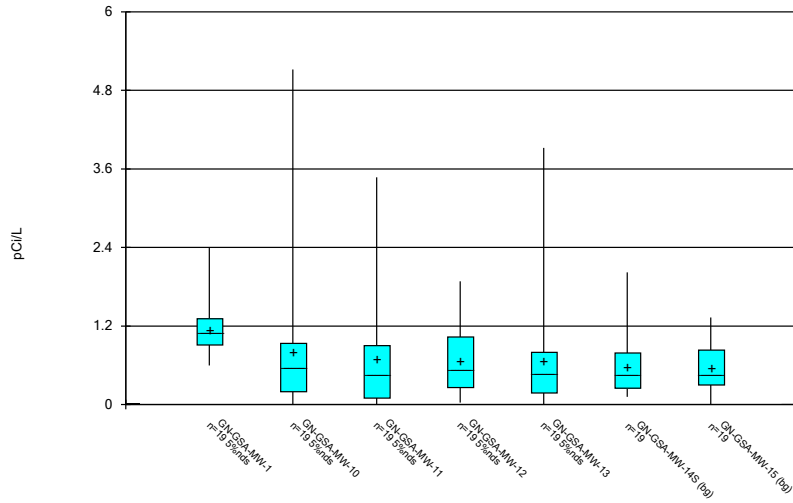
Constituent: Cobalt Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



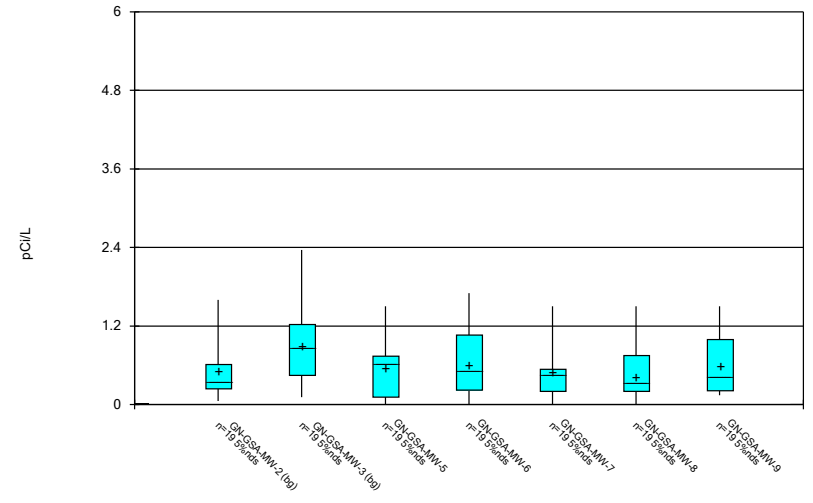
Constituent: Cobalt Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



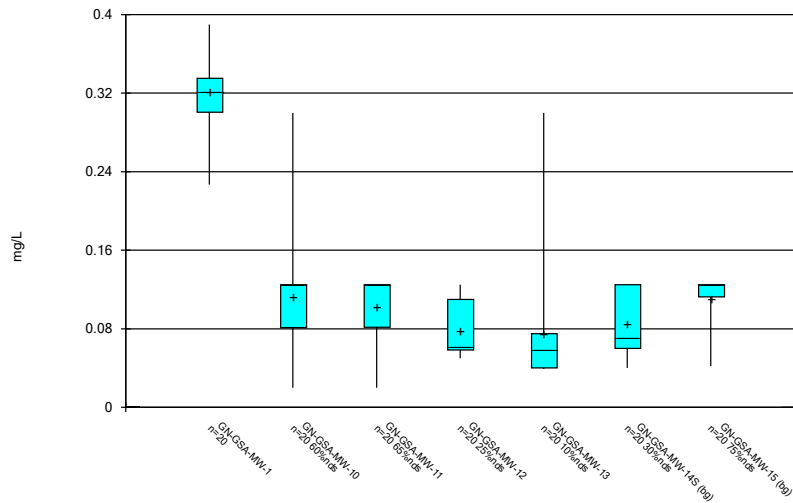
Constituent: Combined Radium 226 + 228 Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



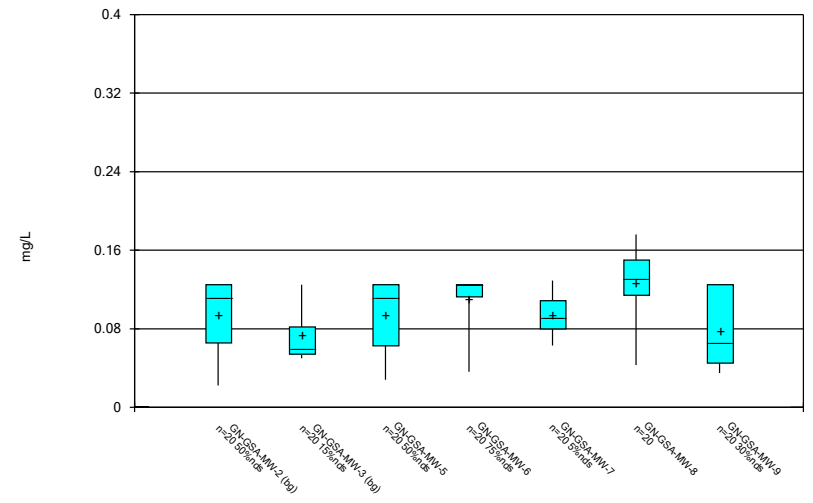
Constituent: Combined Radium 226 + 228 Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



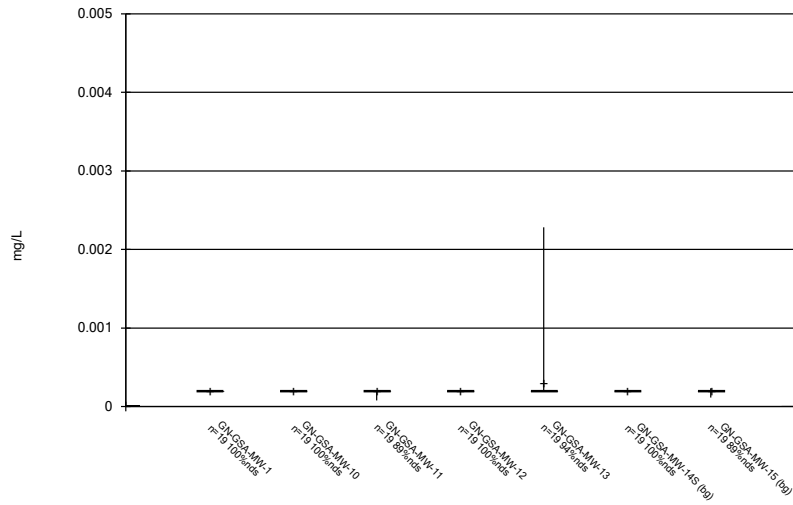
Constituent: Fluoride Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



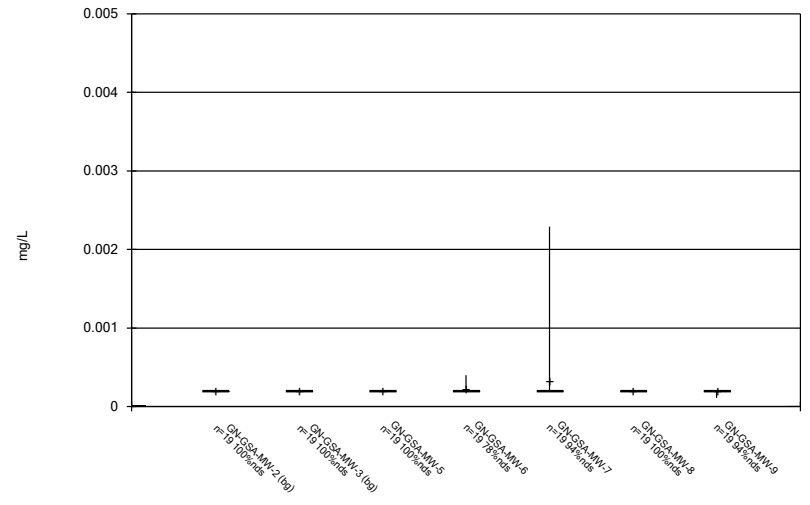
Constituent: Fluoride Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



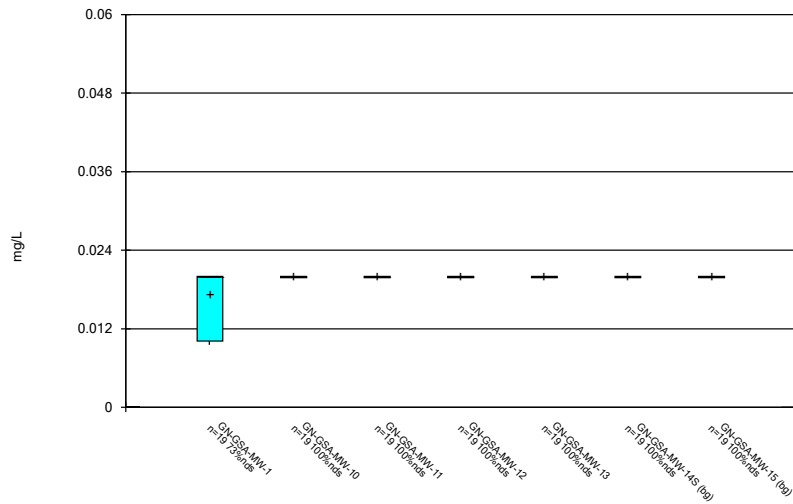
Constituent: Lead Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



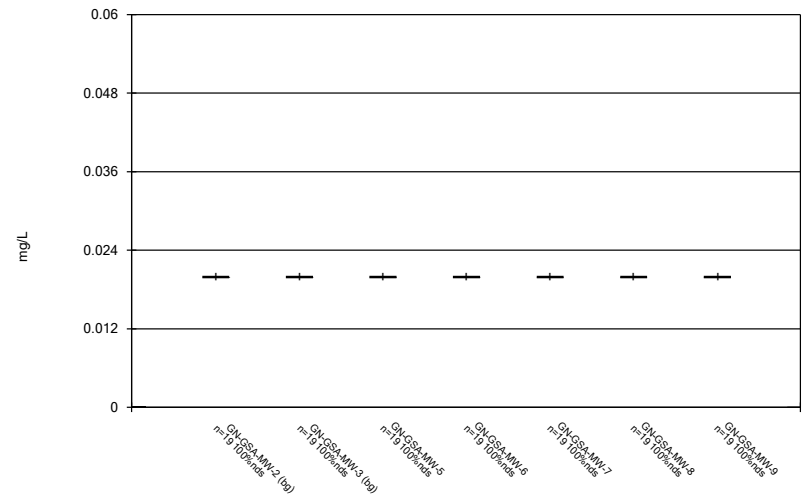
Constituent: Lead Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



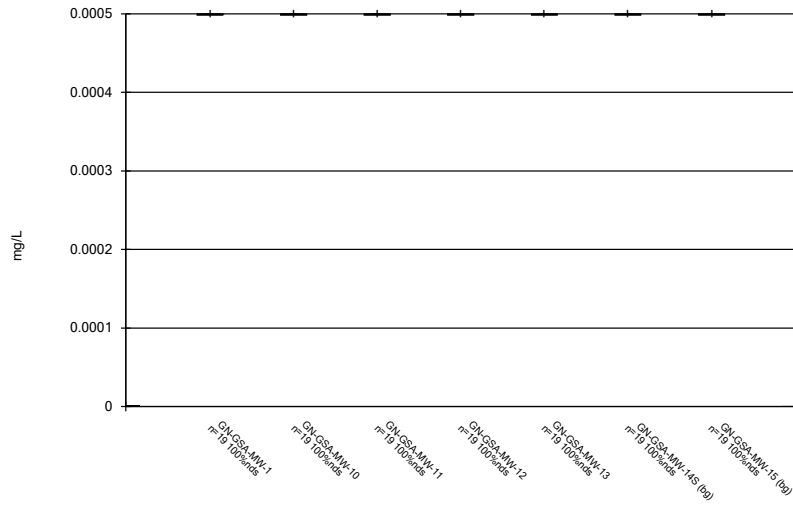
Constituent: Lithium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



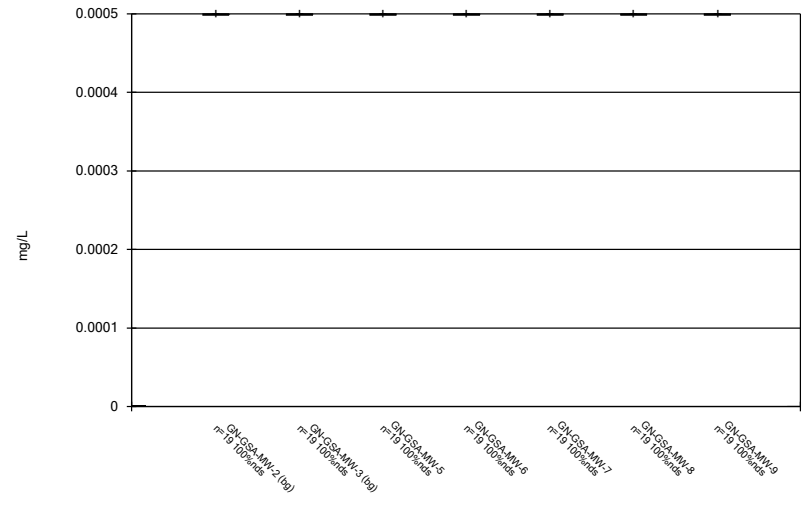
Constituent: Lithium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



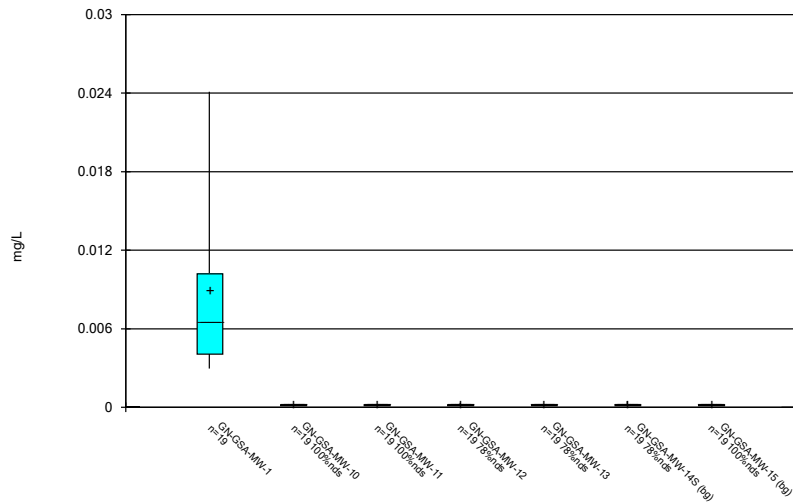
Constituent: Mercury Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



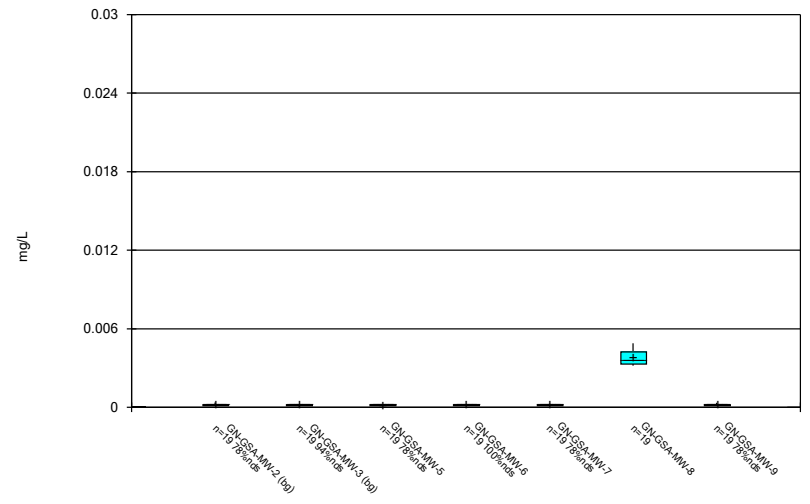
Constituent: Mercury Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



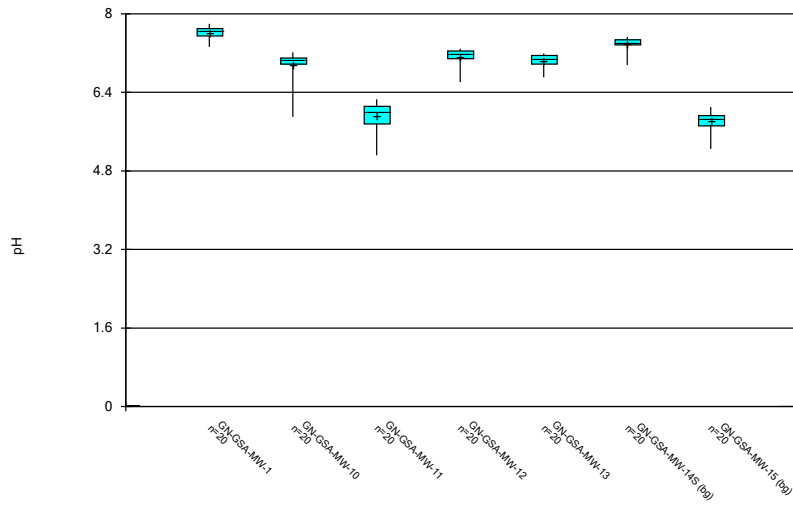
Constituent: Molybdenum Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



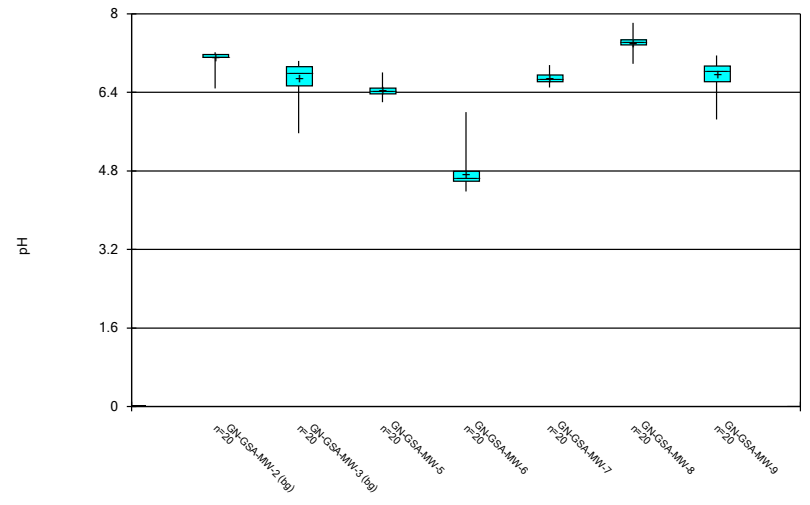
Constituent: Molybdenum Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



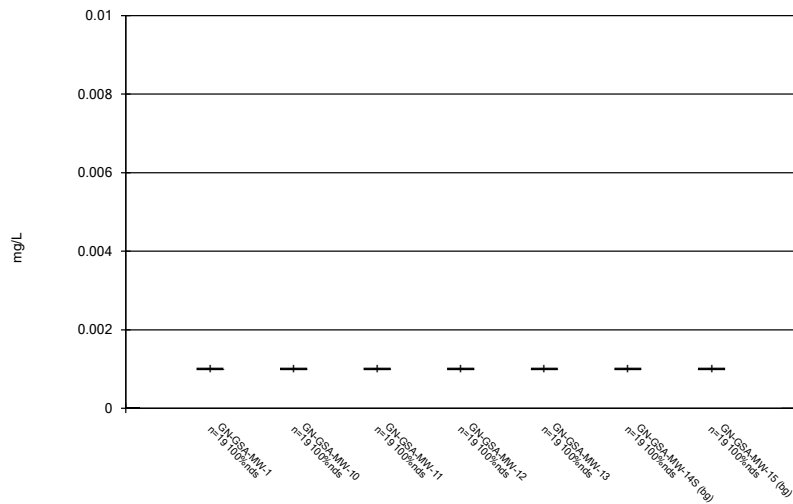
Constituent: pH Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



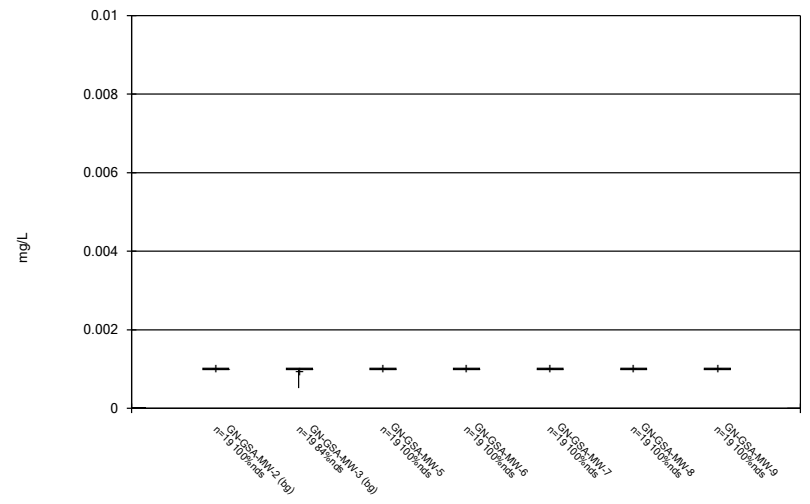
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 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



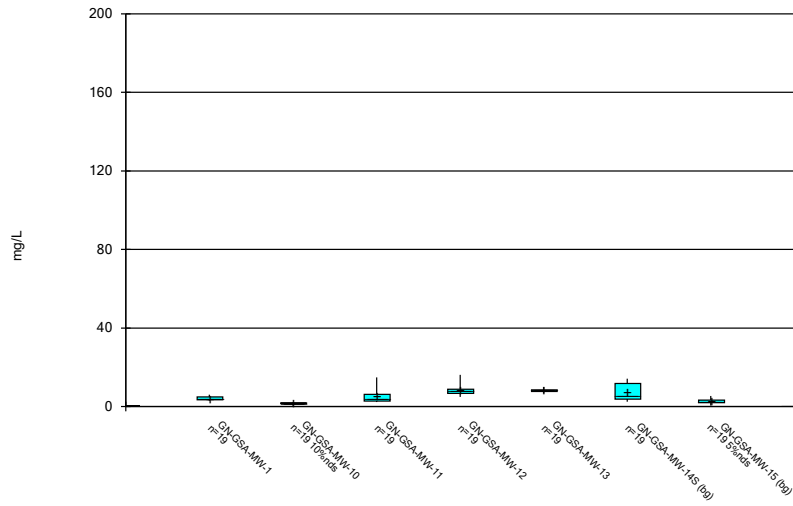
Constituent: Selenium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



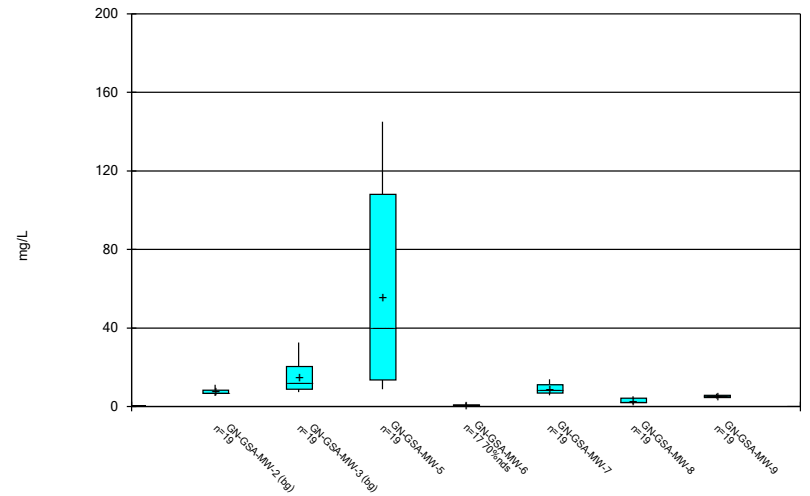
Constituent: Selenium Analysis Run 10/3/2022 2:47 PM  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



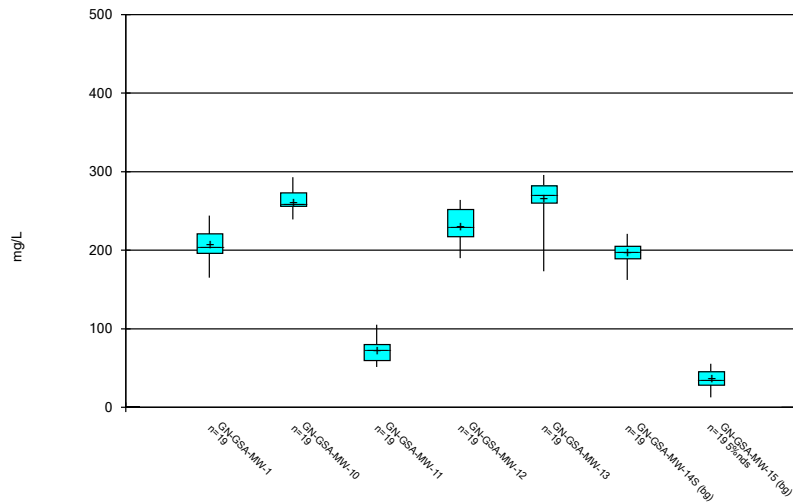
Constituent: Sulfate Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



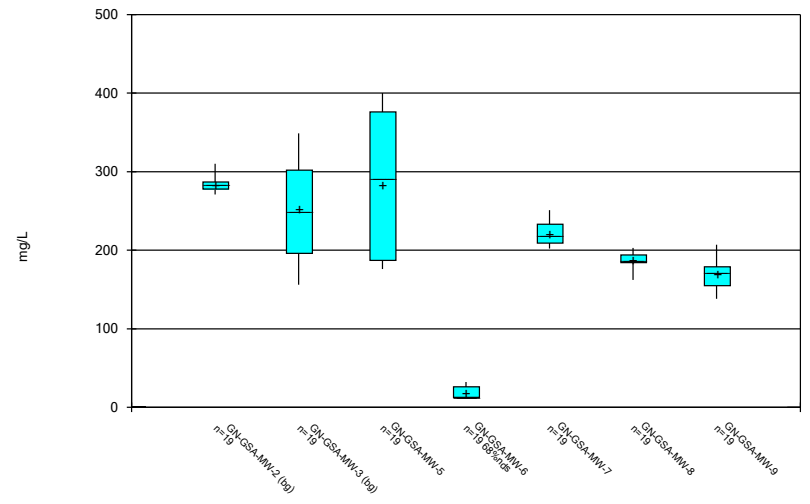
Constituent: Sulfate Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



Constituent: TDS Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

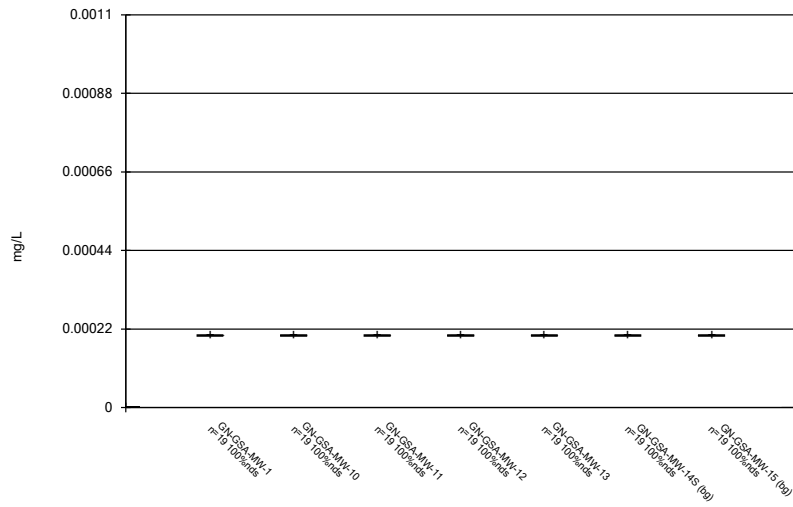
### Box & Whiskers Plot



Constituent: TDS Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

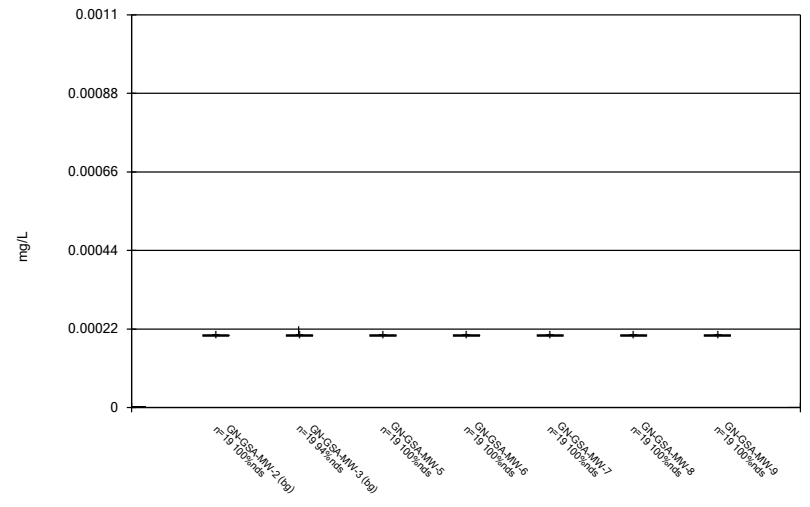


### Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/3/2022 2:47 PM  
Plant Gaston Client: Southern Company Data: Gaston GSA

FIGURE C.

# Outlier Summary

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 2:50 PM

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	GN-GSA-MW-1 Arsenic (mg/L)	GN-GSA-MW-13 Cobalt (mg/L)	GN-GSA-MW-6 Sulfate (mg/L)
3/24/2016	0.0444 (o)		
5/10/2016	0.041 (o)		
7/5/2016	0.0333 (o)		
2/20/2017		5 (o)	
5/30/2017		5 (o)	
5/21/2019	0.0578 (o)		

FIGURE D.

# Appendix III Intrawell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 2:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-1	49.39	n/a	8/18/2022	53.5	Yes	16	39.03	4.343	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-10	108.2	n/a	8/17/2022	118	Yes	16	95.87	5.157	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-12	85.67	n/a	8/18/2022	110	Yes	16	69.87	6.624	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-2	96.06	n/a	8/16/2022	96.3	Yes	16	81.49	6.104	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-5	71.16	n/a	8/16/2022	94.8	Yes	12	54.73	6.323	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-7	76.85	n/a	8/16/2022	82.2	Yes	16	65.81	4.63	0	None	No	0.0007523	Param Intra 1 of 2
Calcium (mg/L)	GN-GSA-MW-9	67.34	n/a	8/17/2022	67.7	Yes	16	50.56	7.034	0	None	No	0.0007523	Param Intra 1 of 2
Chloride (mg/L)	GN-GSA-MW-11	7.709	n/a	8/17/2022	19.5	Yes	9	4.269	1.162	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-5	37.06	n/a	8/16/2022	142	Yes	9	15.51	7.278	0	None	No	0.0007523	Param Intra 1 of 2
Sulfate (mg/L)	GN-GSA-MW-8	2.935	n/a	8/16/2022	5.27	Yes	9	1.843	0.3686	0	None	No	0.0007523	Param Intra 1 of 2
TDS (mg/L)	GN-GSA-MW-5	295.1	n/a	8/16/2022	376	Yes	9	203.3	30.98	0	None	No	0.0007523	Param Intra 1 of 2

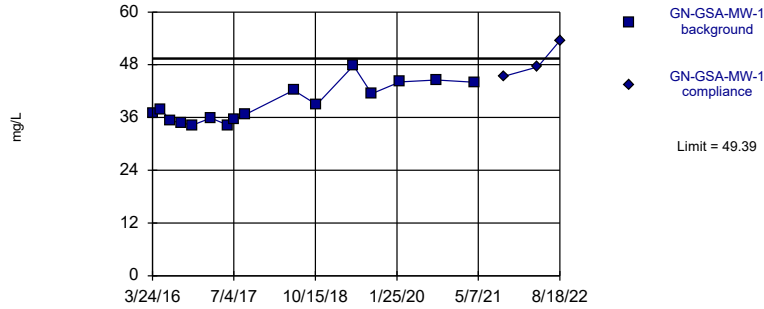
# Appendix III Intrawell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 2:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>49.39</b>	n/a	<b>8/18/2022</b>	<b>53.5</b>	<b>Yes 16</b>	<b>39.03</b>	<b>4.343</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-10</b>	<b>108.2</b>	n/a	<b>8/17/2022</b>	<b>118</b>	<b>Yes 16</b>	<b>95.87</b>	<b>5.157</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-11	15.67	n/a	8/17/2022	12.6	No 16	10.74	2.063	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>85.67</b>	n/a	<b>8/18/2022</b>	<b>110</b>	<b>Yes 16</b>	<b>69.87</b>	<b>6.624</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-13	109.8	n/a	8/16/2022	107	No 16	88.63	8.857	0	None	No	0.0007523	Param Intra 1 of 2	
Calcium (mg/L)	GN-GSA-MW-14S	57.44	n/a	8/16/2022	52.1	No 16	48.82	3.611	0	None	No	0.0007523	Param Intra 1 of 2	
Calcium (mg/L)	GN-GSA-MW-15	11.1	n/a	8/16/2022	4.13	No 16	7.273	1.606	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-2</b>	<b>96.06</b>	n/a	<b>8/16/2022</b>	<b>96.3</b>	<b>Yes 16</b>	<b>81.49</b>	<b>6.104</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-3	125.5	n/a	8/16/2022	50.5	No 16	84.59	17.13	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>71.16</b>	n/a	<b>8/16/2022</b>	<b>94.8</b>	<b>Yes 12</b>	<b>54.73</b>	<b>6.323</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-6	1.491	n/a	8/16/2022	0.516	No 16	0.867	0.2613	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-7</b>	<b>76.85</b>	n/a	<b>8/16/2022</b>	<b>82.2</b>	<b>Yes 16</b>	<b>65.81</b>	<b>4.63</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Calcium (mg/L)	GN-GSA-MW-8	61.1	n/a	8/16/2022	58.4	No 16	55.91	2.177	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-9</b>	<b>67.34</b>	n/a	<b>8/17/2022</b>	<b>67.7</b>	<b>Yes 16</b>	<b>50.56</b>	<b>7.034</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Chloride (mg/L)	GN-GSA-MW-1	3.72	n/a	8/18/2022	2.3	No 16	2.492	0.5148	6.25	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-10	3.733	n/a	8/17/2022	3.11	No 16	7.867	2.545	6.25	None	x^2	0.0007523	Param Intra 1 of 2	
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>7.709</b>	n/a	<b>8/17/2022</b>	<b>19.5</b>	<b>Yes 9</b>	<b>4.269</b>	<b>1.162</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Chloride (mg/L)	GN-GSA-MW-12	5.443	n/a	8/18/2022	3.53	No 16	3.16	0.9566	6.25	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-13	4.799	n/a	8/16/2022	3.47	No 16	3.594	0.5051	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-14S	5.899	n/a	8/16/2022	2.54	No 16	3.731	0.9087	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-15	4.314	n/a	8/16/2022	2.27	No 16	2.366	0.8163	6.25	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-2	4.633	n/a	8/16/2022	3.66	No 16	3.649	0.4125	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-3	3.779	n/a	8/16/2022	3.08	No 16	2.981	0.3341	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-5	21.16	n/a	8/16/2022	9.72	No 16	10.05	4.656	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-6	4.019	n/a	8/16/2022	3.64	No 16	9.249	2.894	6.25	None	x^2	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-7	4.585	n/a	8/16/2022	3.8	No 16	3.546	0.4352	0	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-8	2.505	n/a	8/16/2022	1.69	No 16	1.679	0.3463	12.5	None	No	0.0007523	Param Intra 1 of 2	
Chloride (mg/L)	GN-GSA-MW-9	3.098	n/a	8/17/2022	2.13	No 16	5.326	1.791	6.25	None	x^2	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-1	6.359	n/a	8/18/2022	4.84	No 16	4.188	0.9103	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-10	2.255	n/a	8/17/2022	2.24	No 16	4.979	2.722	12.5	None	x^3	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-11	14.58	n/a	8/17/2022	2.29	No 16	2.28	0.6446	0	None	sqrt(x)	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-12	16.13	n/a	8/18/2022	6.66	No 16	8.719	3.106	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-13	10.31	n/a	8/16/2022	8.54	No 16	8.234	0.871	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-14S	16.97	n/a	8/16/2022	4.71	No 16	7.728	3.872	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-15	5.392	n/a	8/16/2022	3.73	No 16	2.705	1.126	6.25	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-2	11.38	n/a	8/16/2022	8.31	No 16	7.632	1.57	0	None	No	0.0007523	Param Intra 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-3	19.53	n/a	8/16/2022	7.79	No 11	11.88	2.842	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>37.06</b>	n/a	<b>8/16/2022</b>	<b>142</b>	<b>Yes 9</b>	<b>15.51</b>	<b>7.278</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Sulfate (mg/L)	GN-GSA-MW-6	1.89	n/a	8/16/2022	0.5ND	No 14	n/a	n/a	64.29	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2	
Sulfate (mg/L)	GN-GSA-MW-7	14.59	n/a	8/16/2022	6.63	No 16	9.522	2.123	0	None	No	0.0007523	Param Intra 1 of 2	
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>2.935</b>	n/a	<b>8/16/2022</b>	<b>5.27</b>	<b>Yes 9</b>	<b>1.843</b>	<b>0.3686</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
Sulfate (mg/L)	GN-GSA-MW-9	6.776	n/a	8/17/2022	4.58	No 16	5.406	0.5742	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-1	259.7	n/a	8/18/2022	214	No 16	207.7	21.8	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-10	274	n/a	8/17/2022	265	No 9	251.8	7.496	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-11	105.2	n/a	8/17/2022	76	No 16	70.39	14.61	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-12	281.5	n/a	8/18/2022	252	No 16	226.9	22.87	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-13	317.1	n/a	8/16/2022	264	No 16	1.9e7	5203459	0	None	x^3	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-14S	224.5	n/a	8/16/2022	162	No 16	200.8	9.97	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-15	60.07	n/a	8/16/2022	27.3	No 16	39.45	8.643	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-2	309	n/a	8/16/2022	280	No 16	285.3	9.95	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-3	388.2	n/a	8/16/2022	164	No 16	268.7	50.11	0	None	No	0.0007523	Param Intra 1 of 2	
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>295.1</b>	n/a	<b>8/16/2022</b>	<b>376</b>	<b>Yes 9</b>	<b>203.3</b>	<b>30.98</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0007523</b>	<b>Param Intra 1 of 2</b>	
TDS (mg/L)	GN-GSA-MW-6	30	n/a	8/16/2022	12.5ND	No 16	n/a	n/a	68.75	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2	
TDS (mg/L)	GN-GSA-MW-7	256.7	n/a	8/16/2022	212	No 16	220.7	15.11	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-8	202.5	n/a	8/16/2022	162	No 16	188.9	5.691	0	None	No	0.0007523	Param Intra 1 of 2	
TDS (mg/L)	GN-GSA-MW-9	212	n/a	8/17/2022	179	No 16	170.2	17.53	0	None	No	0.0007523	Param Intra 1 of 2	

Exceeds Limit

Prediction Limit  
Intrawell Parametric

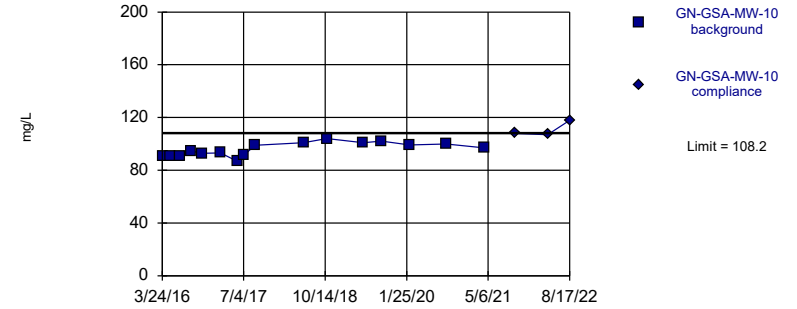


Background Data Summary: Mean=39.03, Std. Dev.=4.343, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8917, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:52 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

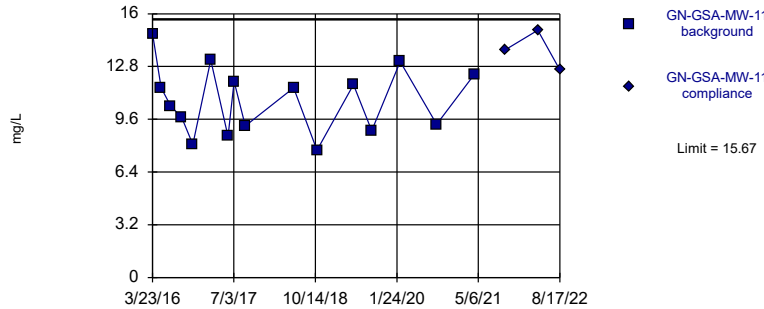


Background Data Summary: Mean=95.87, Std. Dev.=5.157, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9448, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

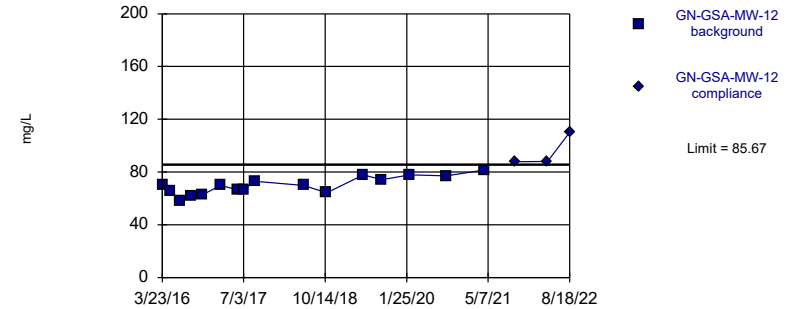


Background Data Summary: Mean=10.74, Std. Dev.=2.063, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9586, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

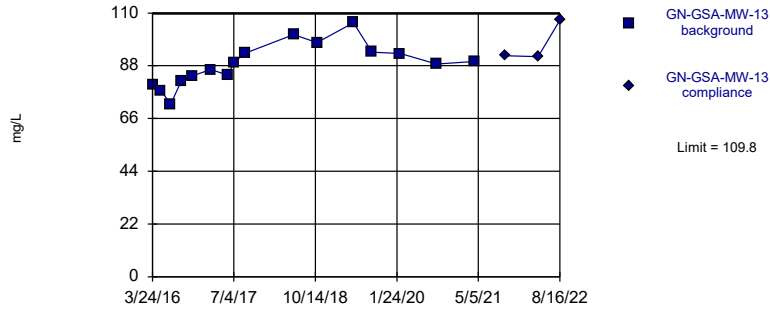


Background Data Summary: Mean=69.87, Std. Dev.=6.624, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9738, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

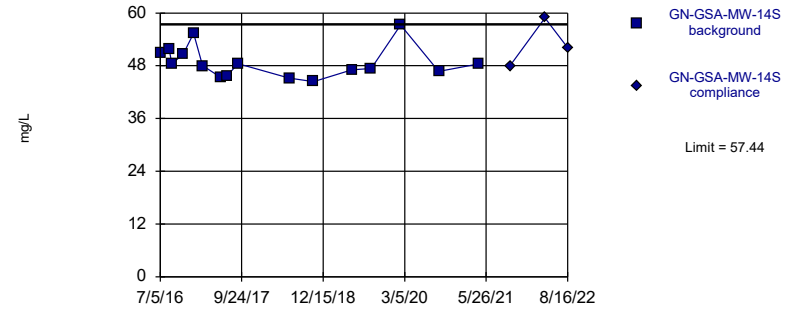


Background Data Summary: Mean=88.63, Std. Dev.=8.857, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9929, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

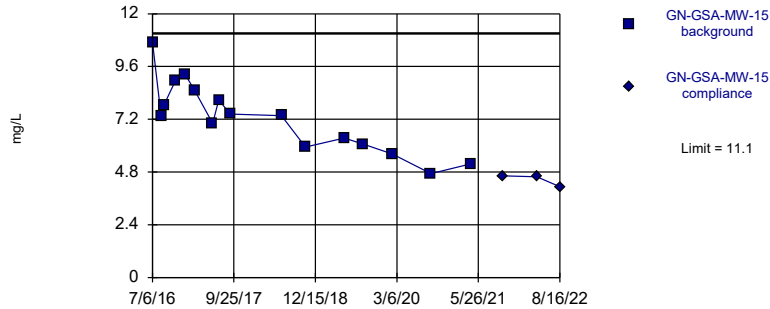


Background Data Summary: Mean=48.82, Std. Dev.=3.611, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8963, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

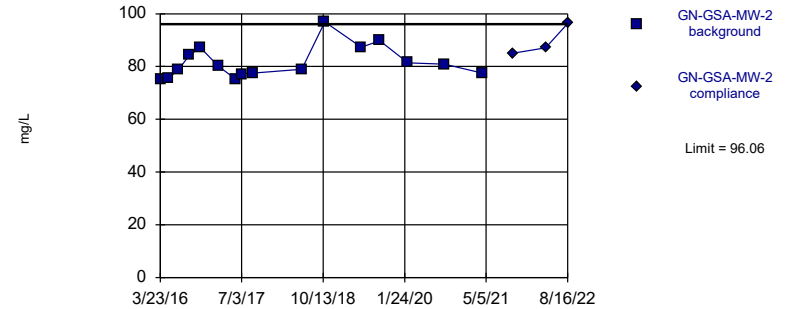


Background Data Summary: Mean=7.273, Std. Dev.=1.606, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9799, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric



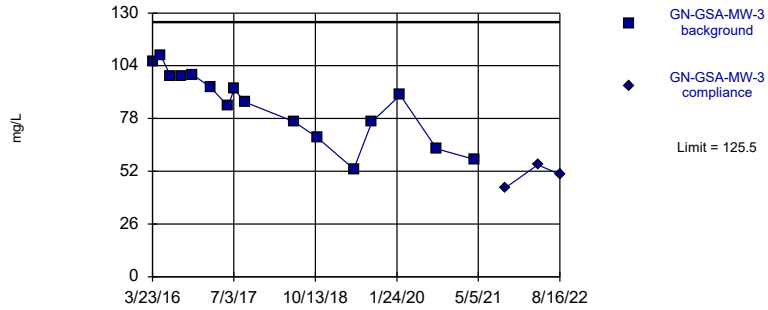
Background Data Summary: Mean=81.49, Std. Dev.=6.104, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.876, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA



Within Limit

Prediction Limit  
Intrawell Parametric

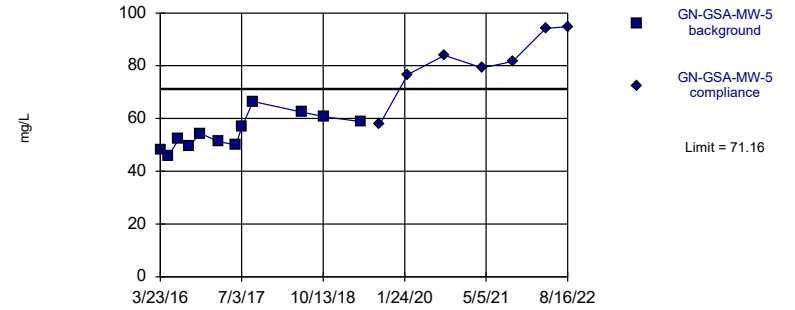


Background Data Summary: Mean=84.59, Std. Dev.=17.13, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9492, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

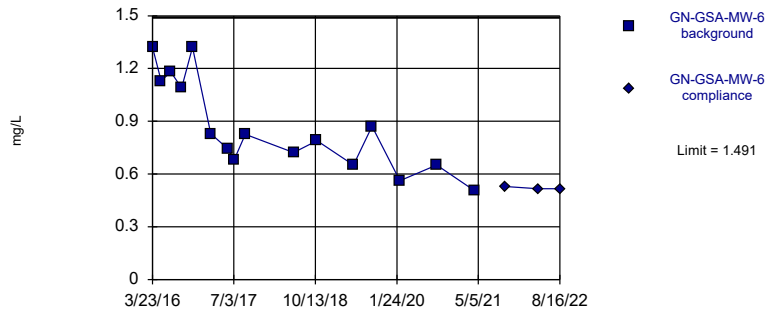


Background Data Summary: Mean=54.73, Std. Dev.=6.323, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.805. Kappa = 2.599 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

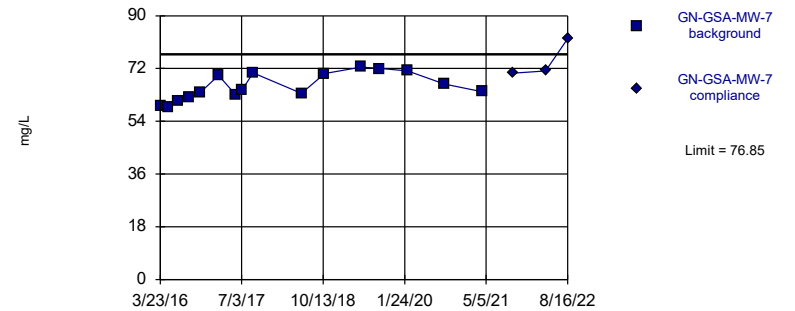


Background Data Summary: Mean=0.867, Std. Dev.=0.2613, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9137, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

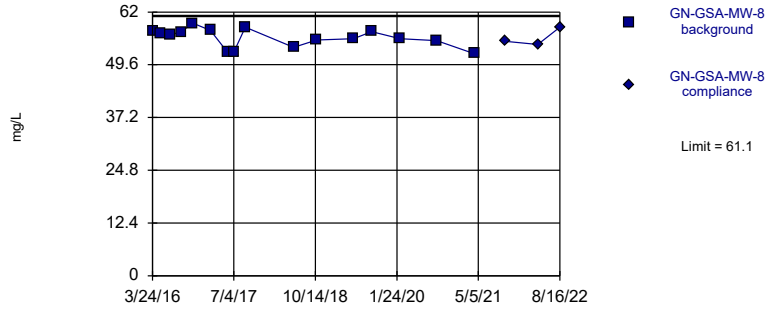


Background Data Summary: Mean=65.81, Std. Dev.=4.63, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9195, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

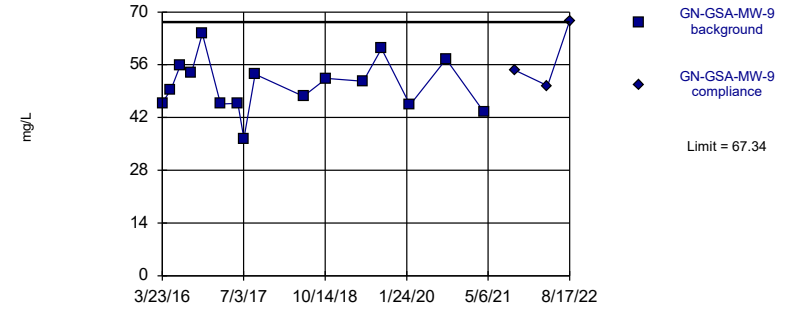


Background Data Summary: Mean=55.91, Std. Dev.=2.177, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9348, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

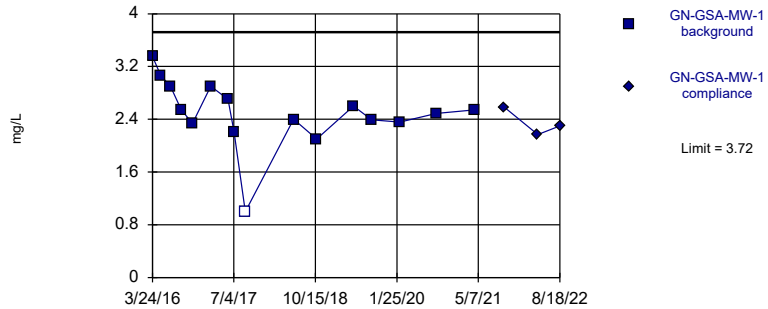


Background Data Summary: Mean=50.56, Std. Dev.=7.034, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9805, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Calcium Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

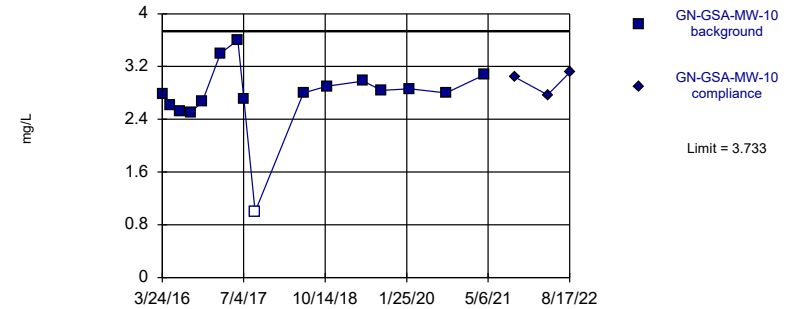


Background Data Summary: Mean=2.492, Std. Dev.=0.5148, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8783, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

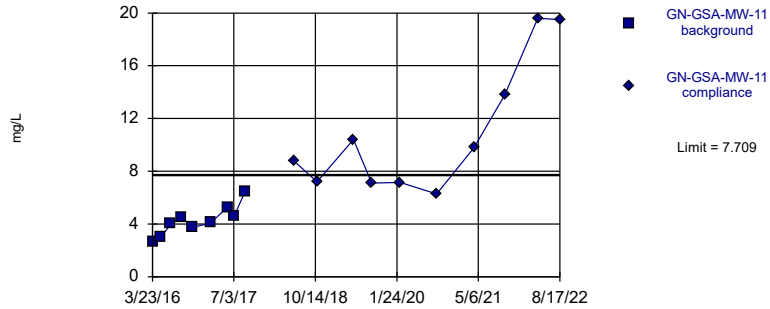


Background Data Summary (based on square transformation): Mean=7.867, Std. Dev.=2.545, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8763, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

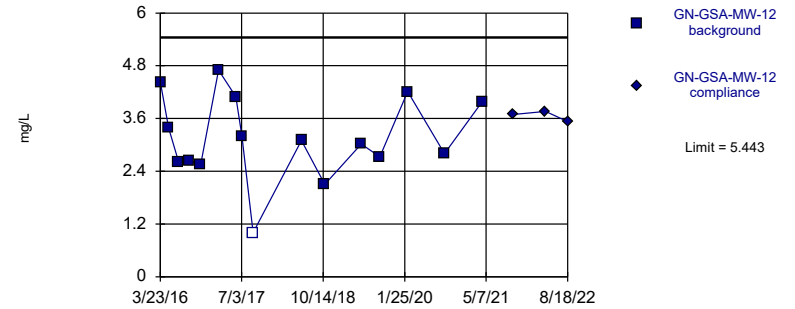


Background Data Summary: Mean=4.269, Std. Dev.=1.162, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9661, critical = 0.764. Kappa = 2.961 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

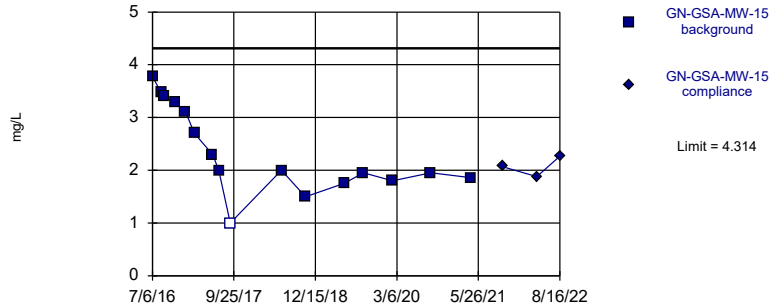
Within Limit

Prediction Limit  
Intrawell Parametric



Within Limit

Prediction Limit  
 Intrawell Parametric

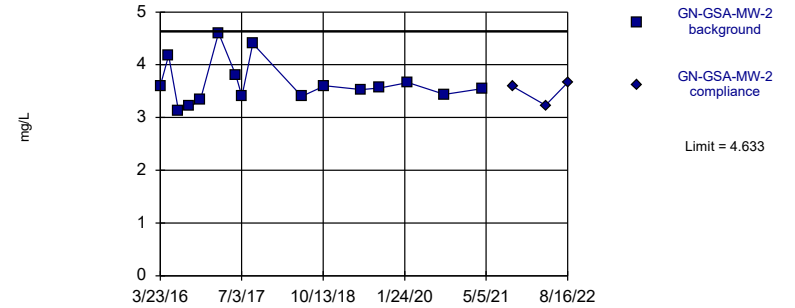


Background Data Summary: Mean=2.366, Std. Dev.=0.8163, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9218, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
 Intrawell Parametric

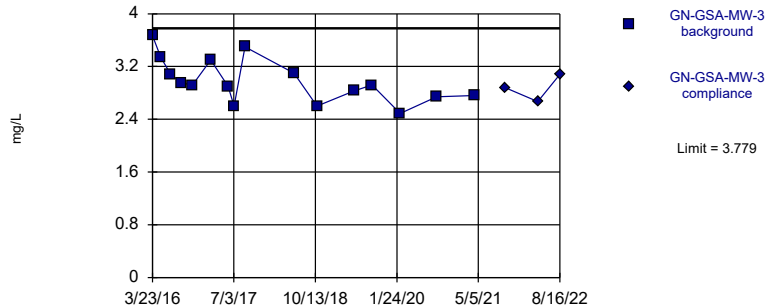


Background Data Summary: Mean=3.649, Std. Dev.=0.4125, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8696, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
 Intrawell Parametric

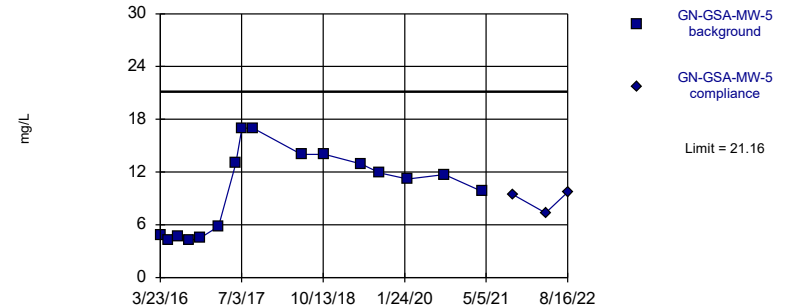


Background Data Summary: Mean=2.981, Std. Dev.=0.3341, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9557, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
 Intrawell Parametric

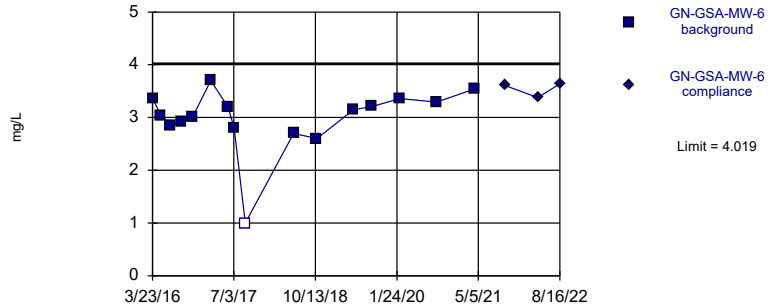


Background Data Summary: Mean=10.05, Std. Dev.=4.656, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8792, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

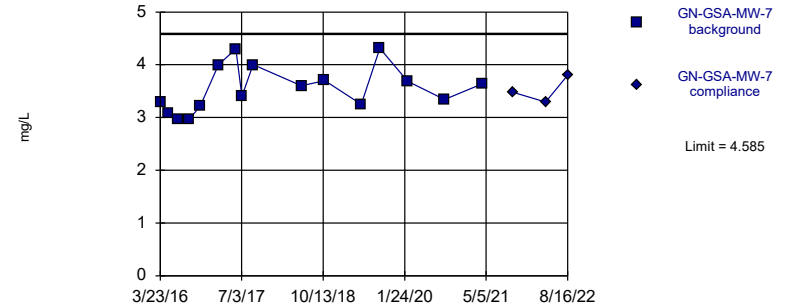


Background Data Summary (based on square transformation): Mean=9.249, Std. Dev.=2.894, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9006, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

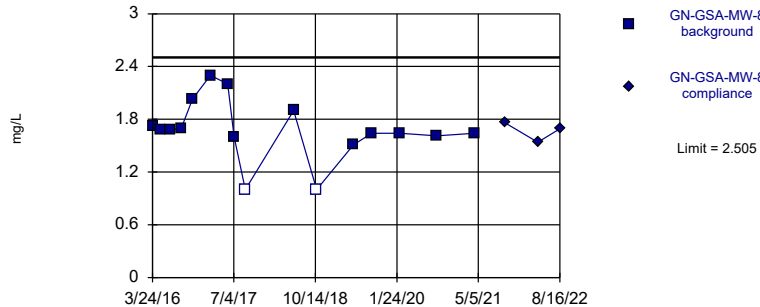


Background Data Summary: Mean=3.546, Std. Dev.=0.4352, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9366, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

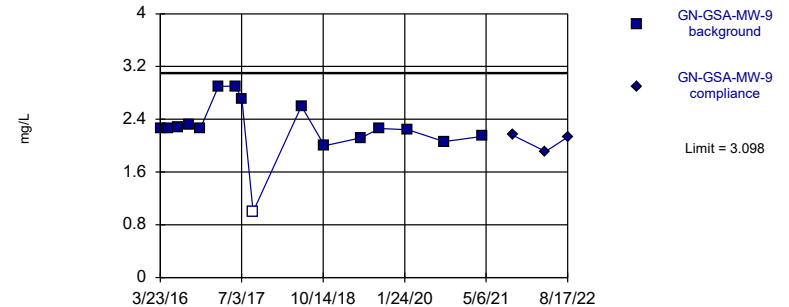


Background Data Summary: Mean=1.679, Std. Dev.=0.3463, n=16, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8939, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric



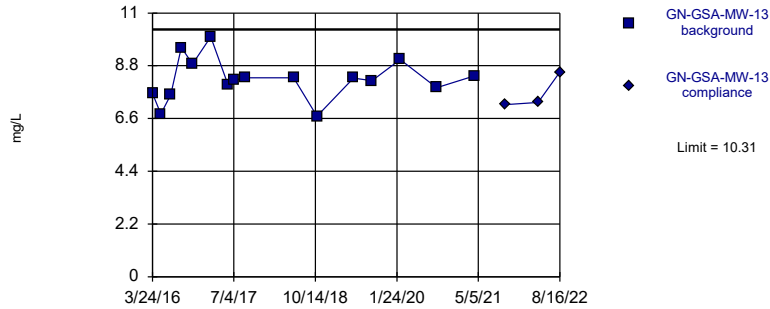
Background Data Summary (based on square transformation): Mean=5.326, Std. Dev.=1.791, n=16, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8883, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Chloride Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA



Within Limit

Prediction Limit  
Intrawell Parametric

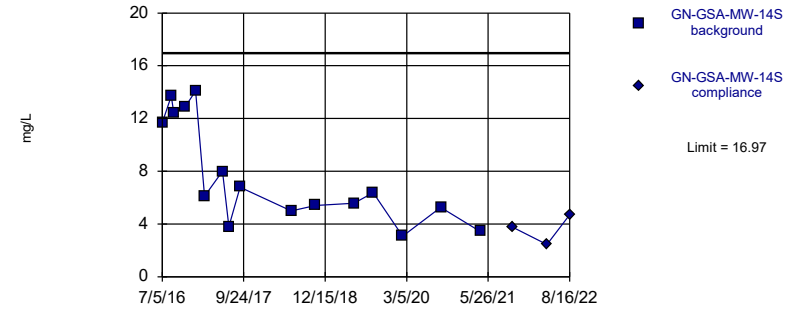


Background Data Summary: Mean=8.234, Std. Dev.=0.871, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9563, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

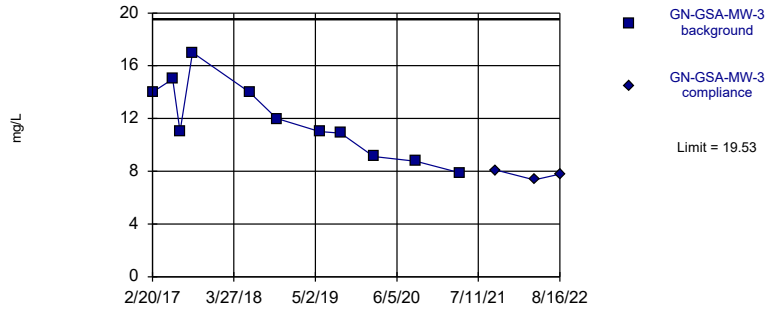
Within Limit

Prediction Limit  
Intrawell Parametric



Within Limit

Prediction Limit  
Intrawell Parametric

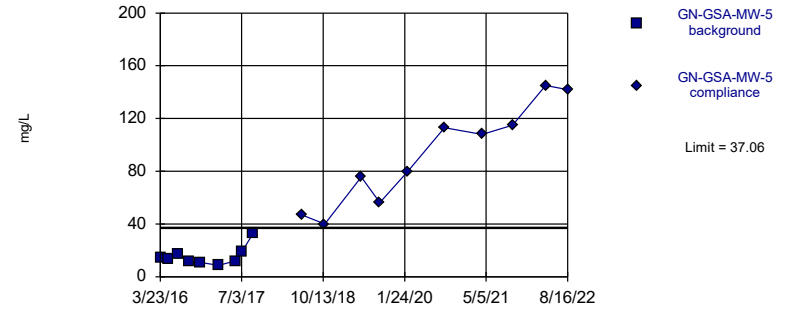


Background Data Summary: Mean=11.88, Std. Dev.=2.842, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9567, critical = 0.792. Kappa = 2.694 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit  
Intrawell Parametric

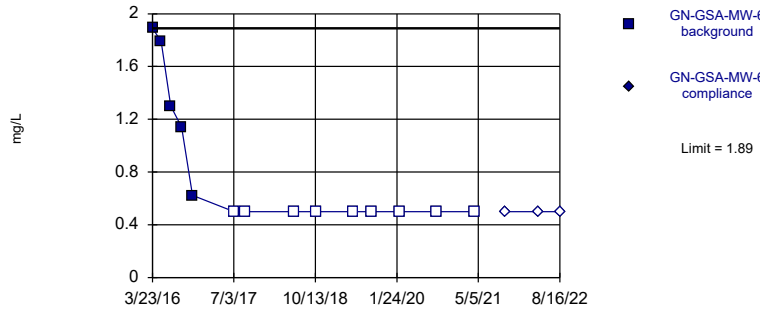


Background Data Summary: Mean=15.51, Std. Dev.=7.278, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7851, critical = 0.764. Kappa = 2.961 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Non-parametric

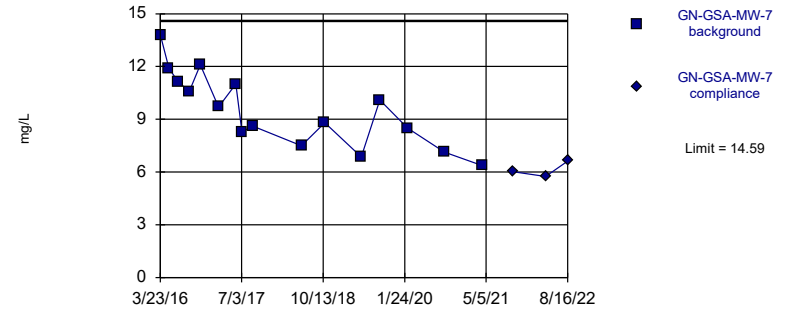


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Sulfate Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric



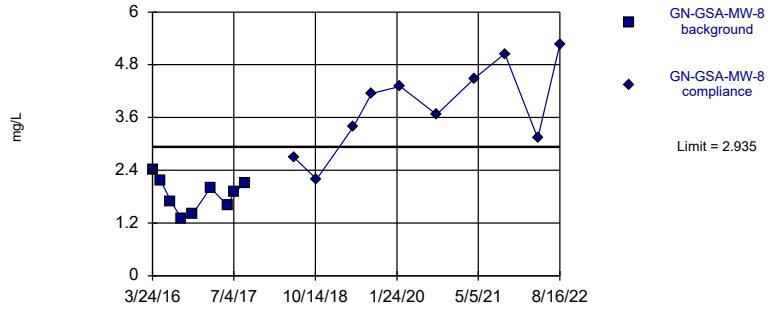
Background Data Summary: Mean=9.522, Std. Dev.=2.123, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9688, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA



Exceeds Limit

Prediction Limit  
Intrawell Parametric

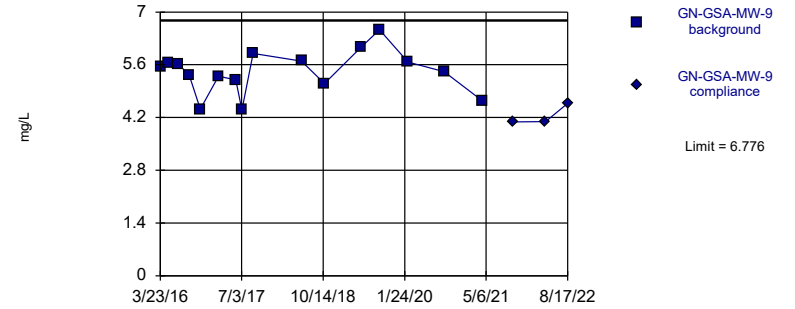


Background Data Summary: Mean=1.843, Std. Dev.=0.3686, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9707, critical = 0.764. Kappa = 2.961 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

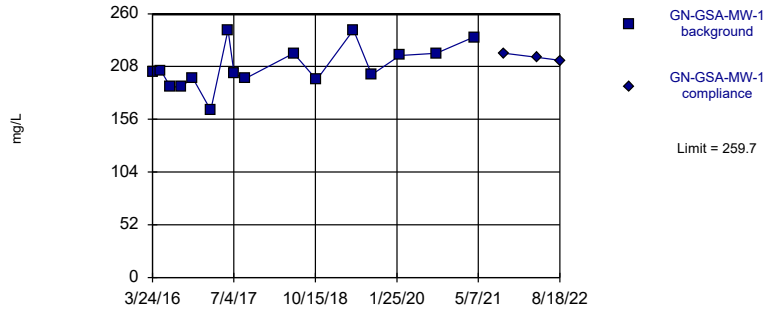


Background Data Summary: Mean=5.406, Std. Dev.=0.5742, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9576, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Sulfate Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

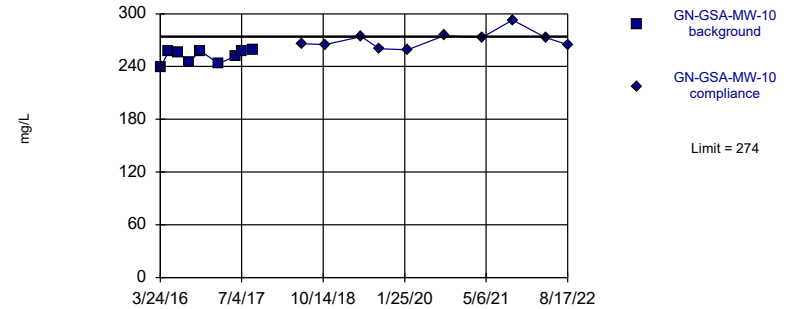


Background Data Summary: Mean=207.7, Std. Dev.=21.8, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9403, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

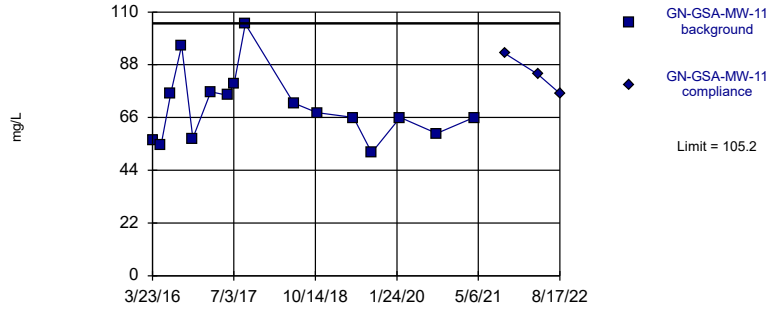


Background Data Summary: Mean=251.8, Std. Dev.=7.496, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8447, critical = 0.764. Kappa = 2.961 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

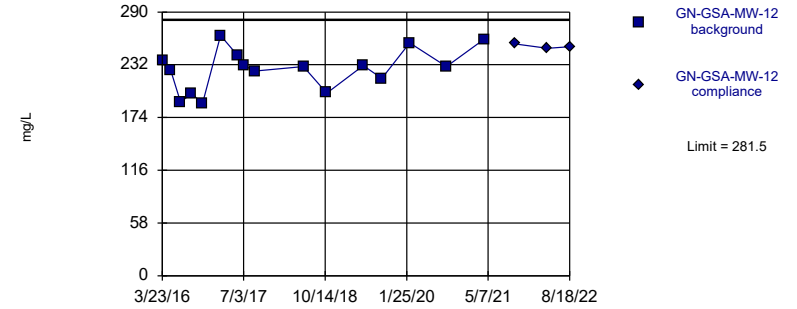


Background Data Summary: Mean=70.39, Std. Dev.=14.61, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9153, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
Intrawell Parametric

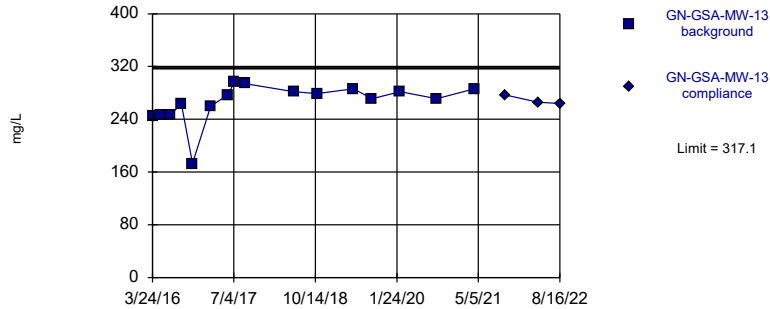


Background Data Summary: Mean=226.9, Std. Dev.=22.87, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9418, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

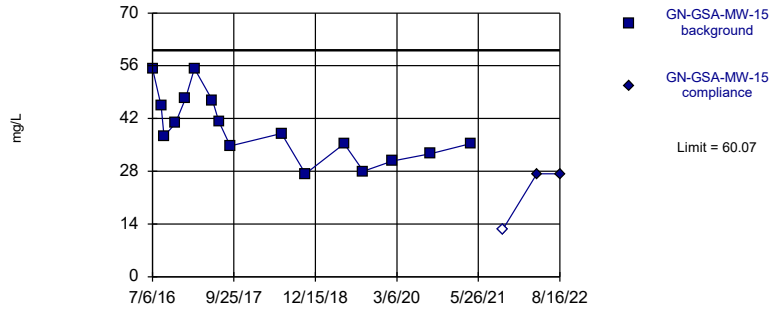
Within Limit

Prediction Limit  
Intrawell Parametric



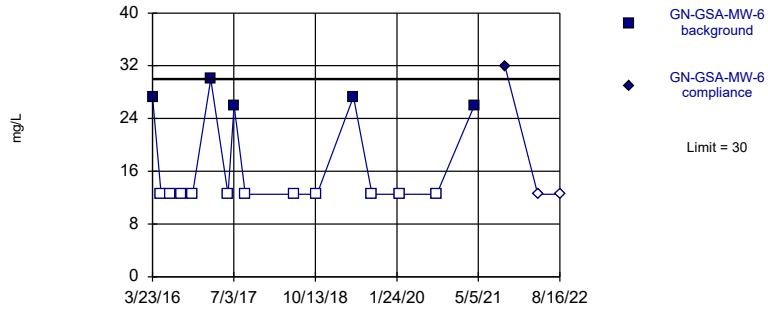
Within Limit

Prediction Limit  
 Intrawell Parametric



Within Limit

Prediction Limit  
 Intrawell Non-parametric

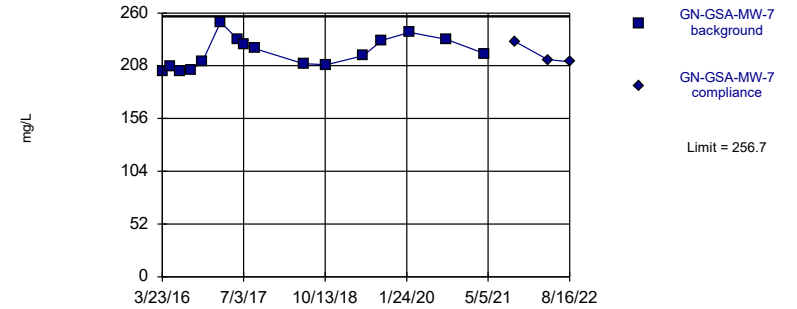


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 16 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: TDS Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
 Intrawell Parametric

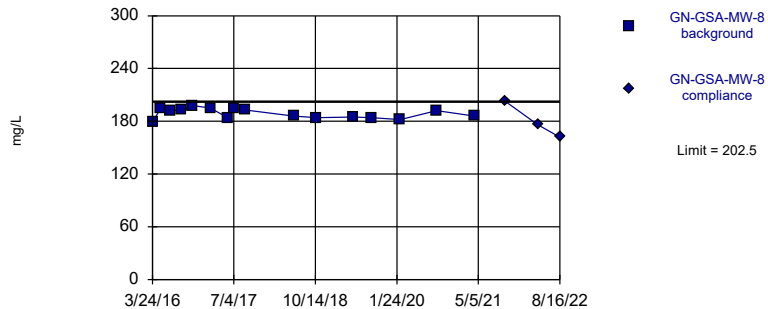


Background Data Summary: Mean=220.7, Std. Dev.=15.11, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9356, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
 Intrawell Parametric

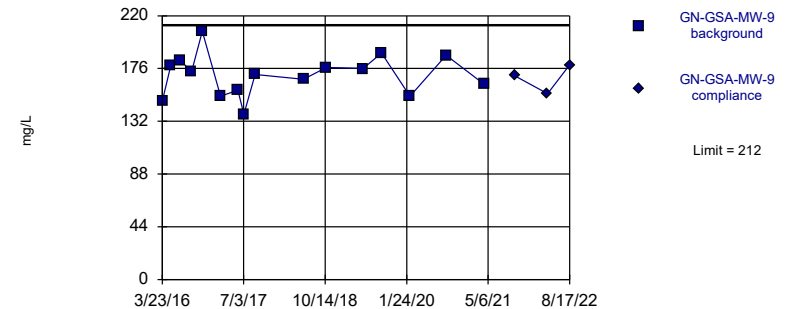


Background Data Summary: Mean=188.9, Std. Dev.=5.691, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9231, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit  
 Intrawell Parametric



Background Data Summary: Mean=170.2, Std. Dev.=17.53, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9873, critical = 0.844. Kappa = 2.386 (c=7, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: TDS Analysis Run 10/3/2022 2:53 PM View: Appendix III - Intrawell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	44.1	
9/9/2020	44.5	
4/13/2021	44	
10/4/2021		45.4
4/13/2022		47.5
8/18/2022		53.5

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	99.2	
9/8/2020	99.9	
4/13/2021	97.1	
10/5/2021		108
4/13/2022		107
8/17/2022		118

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	13.1	
9/9/2020	9.3	
4/13/2021	12.3	
10/5/2021		13.8
4/13/2022		15
8/17/2022		12.6

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	77.8	
9/9/2020	77	
4/13/2021	81.6	
10/5/2021		87.9
4/13/2022		88
8/18/2022		110



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	93.1	
9/9/2020	88.7	
4/13/2021	89.8	
10/4/2021		92.2
4/13/2022		91.8
8/16/2022		107

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	57.3	
9/9/2020	46.7	
4/13/2021	48.4	
10/4/2021		48
4/13/2022		58.9
8/16/2022		52.099998

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	5.62	
9/9/2020	4.73	
4/13/2021	5.17	
10/6/2021		4.62
4/12/2022		4.59
8/16/2022		4.13

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
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	
2/12/2020	81.4	
9/9/2020	80.9	
4/13/2021	77.5	
10/4/2021		85
4/12/2022		87.1
8/16/2022		96.300003

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
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	
2/12/2020	89.6	
9/9/2020	63.1	
4/13/2021	57.8	
10/4/2021		43.7
4/12/2022		55.1
8/16/2022		50.5

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/11/2020		76.6
9/8/2020		83.9
4/13/2021		79.2
10/4/2021		81.6
4/12/2022		94.1
8/16/2022		94.800003

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	0.562	
9/8/2020	0.652	
4/13/2021	0.505	
10/4/2021		0.53
4/12/2022		0.516
8/16/2022		0.516

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	71.2	
9/9/2020	66.7	
4/13/2021	64.1	
10/4/2021		70.4
4/12/2022		71.2
8/16/2022		82.199997



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	55.7	
9/9/2020	55.3	
4/13/2021	52.2	
10/4/2021		55.1
4/12/2022		54.4
8/16/2022		58.400002

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	45.3	
9/8/2020	57.5	
4/13/2021	43.5	
10/5/2021		54.6
4/12/2022		50.4
8/17/2022		67.699997

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.36	
9/9/2020	2.49	
4/13/2021	2.54	
10/4/2021		2.58
4/13/2022		2.17
8/18/2022		2.3

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.86	
9/8/2020	2.8	
4/13/2021	3.07	
10/5/2021		3.04
4/13/2022		2.77
8/17/2022		3.11

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/12/2020		7.16
9/9/2020		6.27
4/13/2021		9.8
10/5/2021		13.8
4/13/2022		19.6
8/17/2022		19.5

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	4.21	
9/9/2020	2.8	
4/13/2021	3.97	
10/5/2021		3.69
4/13/2022		3.76
8/18/2022		3.53

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	4.1	
9/9/2020	3.4	
4/13/2021	3.56	
10/4/2021		3.37
4/13/2022		3.01
8/16/2022		3.47

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.4	
9/9/2020	2.49	
4/13/2021	2.56	
10/4/2021		2.5
4/13/2022		2.42
8/16/2022		2.54



# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	1.8	
9/9/2020	1.95	
4/13/2021	1.86	
10/6/2021		2.07
4/12/2022		1.88
8/16/2022		2.27

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
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	
2/12/2020	3.66	
9/9/2020	3.44	
4/13/2021	3.55	
10/4/2021		3.59
4/12/2022		3.23
8/16/2022		3.66

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.49	
9/9/2020	2.74	
4/13/2021	2.76	
10/4/2021		2.88
4/12/2022		2.67
8/16/2022		3.08

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	11.2	
9/8/2020	11.7	
4/13/2021	9.78	
10/4/2021		9.45
4/12/2022		7.35
8/16/2022		9.72

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
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	
2/11/2020	3.36	
9/8/2020	3.29	
4/13/2021	3.54	
10/4/2021		3.61
4/12/2022		3.38
8/16/2022		3.64

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	3.69	
9/9/2020	3.34	
4/13/2021	3.64	
10/4/2021		3.48
4/12/2022		3.29
8/16/2022		3.8

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
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	
2/12/2020	1.64	
9/9/2020	1.61	
4/13/2021	1.64	
10/4/2021		1.76
4/12/2022		1.54
8/16/2022		1.69

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intravel  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	2.24	
9/8/2020	2.06	
4/13/2021	2.14	
10/5/2021		2.16
4/12/2022		1.91
8/17/2022		2.13



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	5.11	
9/9/2020	3.97	
4/13/2021	4.43	
10/4/2021		4.08
4/13/2022		4.24
8/18/2022		4.84

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	<1	
9/7/2017	1.7 (J)	
6/12/2018	1.8 (J)	
10/24/2018	<1	
5/21/2019	1.72	
9/3/2019	1.73	
2/12/2020	1.65	
9/8/2020	1.62	
4/13/2021	1.68	
10/5/2021		1.8
4/13/2022		1.68 (J)
8/17/2022		2.24

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	3.89	
9/9/2020	3.01	
4/13/2021	2.77	
10/5/2021		2.86
4/13/2022		2.73
8/17/2022		2.29

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	13.1	
9/9/2020	5.85	
4/13/2021	8.86	
10/5/2021		8.02
4/13/2022		8.25
8/18/2022		6.66

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	9.06	
9/9/2020	7.89	
4/13/2021	8.38	
10/4/2021		7.18
4/13/2022		7.27
8/16/2022		8.54

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	3.09	
9/9/2020	5.26	
4/13/2021	3.45	
10/4/2021		3.78
4/13/2022		2.44
8/16/2022		4.71

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	<1	
5/22/2019	2.82	
9/4/2019	2.3	
2/12/2020	1.77	
9/9/2020	2	
4/13/2021	2.51	
10/6/2021		2.15
4/12/2022		1.76 (J)
8/16/2022		3.73

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	10.7	
9/9/2020	7.77	
4/13/2021	7.44	
10/4/2021		6.86
4/12/2022		8.36
8/16/2022		8.31



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	9.13	
9/9/2020	8.76	
4/13/2021	7.88	
10/4/2021		8.09
4/12/2022		7.36
8/16/2022		7.79

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/11/2020		79.7
9/8/2020		113
4/13/2021		108
10/4/2021		115
4/12/2022		145
8/16/2022		142

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell

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 (o)	
5/30/2017	5 (o)	
7/5/2017	<1	
9/7/2017	<1	
6/11/2018	<1	
10/22/2018	<1	
5/20/2019	<1	
9/4/2019	<1	
2/11/2020	<1	
9/8/2020	<1	
4/13/2021	<1	
10/4/2021		<1
4/12/2022		<1
8/16/2022		<1

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	8.5	
9/9/2020	7.13	
4/13/2021	6.37	
10/4/2021		6.02
4/12/2022		5.75
8/16/2022		6.63

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/12/2020		4.31
9/9/2020		3.67
4/13/2021		4.49
10/4/2021		5.05
4/12/2022		3.13
8/16/2022		5.27

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - Intrawell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	5.67	
9/8/2020	5.42	
4/13/2021	4.65	
10/5/2021		4.08
4/12/2022		4.09
8/17/2022		4.58

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	219	
9/9/2020	221	
4/13/2021	237	
10/4/2021		221
4/13/2022		217
8/18/2022		214

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/12/2020		259
9/8/2020		275
4/13/2021		273
10/5/2021		293
4/13/2022		273
8/17/2022		265



# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	66	
9/9/2020	59.3	
4/13/2021	66	
10/5/2021		92.7
4/13/2022		84
8/17/2022		76

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	256	
9/9/2020	230	
4/13/2021	260	
10/5/2021		255
4/13/2022		250
8/18/2022		252

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	282	
9/9/2020	271	
4/13/2021	286	
10/4/2021		277
4/13/2022		266
8/16/2022		264

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	189	
9/9/2020	198	
4/13/2021	191	
10/4/2021		183
4/13/2022		187
8/16/2022		162

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	30.7	
9/9/2020	32.7	
4/13/2021	35.3	
10/6/2021		<25
4/12/2022		27.3
8/16/2022		27.299999

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	276	
9/9/2020	272	
4/13/2021	283	
10/4/2021		287
4/12/2022		271
8/16/2022		280

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	250	
9/9/2020	220	
4/13/2021	196	
10/4/2021		168
4/12/2022		156
8/16/2022		164

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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
2/11/2020		308
9/8/2020		360
4/13/2021		350
10/4/2021		379
4/12/2022		400
8/16/2022		376



# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	<25	
9/8/2020	<25	
4/13/2021	26	
10/4/2021		32
4/12/2022		<25
8/16/2022		<25

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/11/2020	241	
9/9/2020	234	
4/13/2021	220	
10/4/2021		232
4/12/2022		214
8/16/2022		212

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	182	
9/9/2020	192	
4/13/2021	186	
10/4/2021		203
4/12/2022		176
8/16/2022		162

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/3/2022 2:59 PM View: Appendix III - IntraWell  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	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	
2/12/2020	153	
9/8/2020	187	
4/13/2021	163	
10/5/2021		170
4/12/2022		155
8/17/2022		179

FIGURE E.

# Appendix III Interwell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GN-GSA-MW-1	0.125	n/a	8/18/2022	0.327	Yes	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-6	7.53	5.25	8/16/2022	4.58	Yes	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2

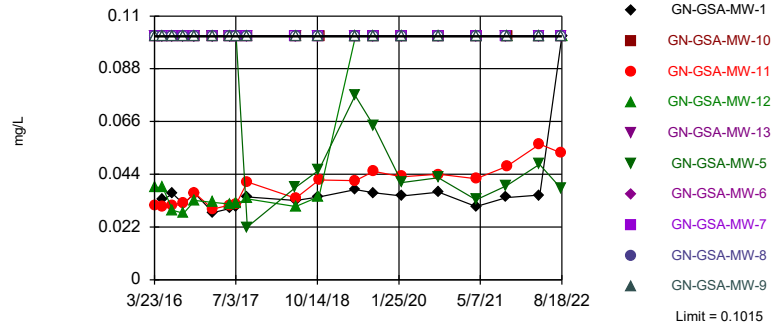
# Appendix III Interwell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GN-GSA-MW-1	0.1015	n/a	8/18/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-10	0.1015	n/a	8/17/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-11	0.1015	n/a	8/17/2022	0.0528J	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-12	0.1015	n/a	8/18/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-13	0.1015	n/a	8/16/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-5	0.1015	n/a	8/16/2022	0.0379J	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-6	0.1015	n/a	8/16/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-7	0.1015	n/a	8/16/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-8	0.1015	n/a	8/16/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-9	0.1015	n/a	8/17/2022	0.1015ND	No	76	n/a	n/a	98.68	n/a	n/a	0.0003321	NP Inter (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>0.125</b>	<b>n/a</b>	<b>8/18/2022</b>	<b>0.327</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>42.5</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002971</b>	<b>NP Inter (normality) 1 of 2</b>
Fluoride (mg/L)	GN-GSA-MW-10	0.125	n/a	8/17/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-11	0.125	n/a	8/17/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-12	0.125	n/a	8/18/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-13	0.125	n/a	8/16/2022	0.0614J	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-5	0.125	n/a	8/16/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-6	0.125	n/a	8/16/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-7	0.125	n/a	8/16/2022	0.112J	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-8	0.125	n/a	8/16/2022	0.0979J	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-9	0.125	n/a	8/17/2022	0.125ND	No	80	n/a	n/a	42.5	n/a	n/a	0.0002971	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-1	7.53	5.25	8/18/2022	7.46	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-10	7.53	5.25	8/17/2022	6.97	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-11	7.53	5.25	8/17/2022	5.6	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-12	7.53	5.25	8/18/2022	6.82	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-13	7.53	5.25	8/16/2022	6.92	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-5	7.53	5.25	8/16/2022	6.28	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
<b>pH (pH)</b>	<b>GN-GSA-MW-6</b>	<b>7.53</b>	<b>5.25</b>	<b>8/16/2022</b>	<b>4.58</b>	<b>Yes</b>	<b>80</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005943</b>	<b>NP Inter (normality) 1 of 2</b>
pH (pH)	GN-GSA-MW-7	7.53	5.25	8/16/2022	6.7	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-8	7.53	5.25	8/16/2022	6.98	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-9	7.53	5.25	8/17/2022	6.84	No	80	n/a	n/a	0	n/a	n/a	0.0005943	NP Inter (normality) 1 of 2

Within Limit

Prediction Limit  
Interwell Non-parametric

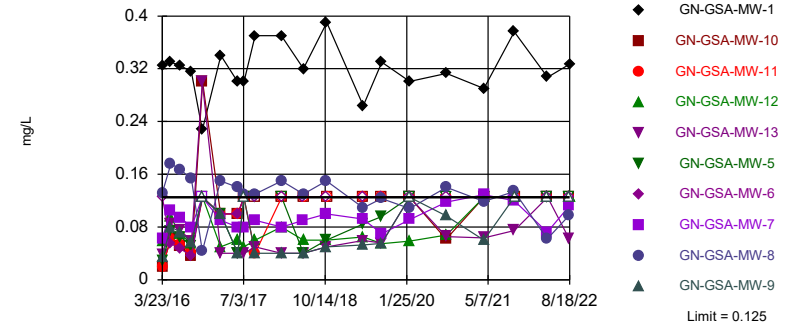


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 76 background values. 98.68% NDs. Annual per-constituent alpha = 0.006622. Individual comparison alpha = 0.0003321 (1 of 2). Comparing 10 points to limit.

Constituent: Boron Analysis Run 10/3/2022 3:49 PM View: Appendix III - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit: GN-GSA-MW-1

Prediction Limit  
Interwell Non-parametric

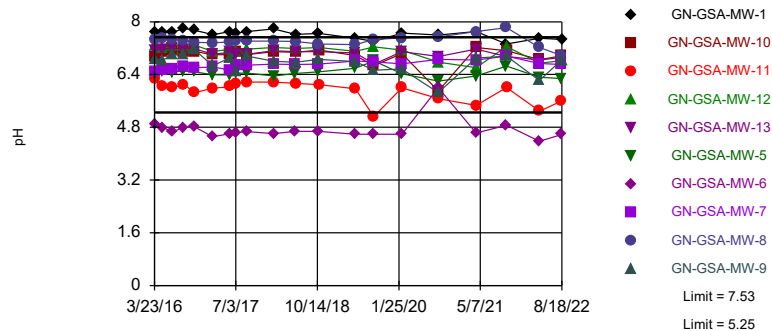


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 80 background values. 42.5% NDs. Annual per-constituent alpha = 0.005926. Individual comparison alpha = 0.0002971 (1 of 2). Comparing 10 points to limit.

Constituent: Fluoride Analysis Run 10/3/2022 3:49 PM View: Appendix III - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limits: GN-GSA-MW-6

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 80 background values. Annual per-constituent alpha = 0.01185. Individual comparison alpha = 0.0005943 (1 of 2). Comparing 10 points to limit.

Constituent: pH Analysis Run 10/3/2022 3:49 PM View: Appendix III - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA





# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/3/2022 3:50 PM View: Appendix III - Interwell  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-8	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016					
3/24/2016	<0.1015	<0.1015	<0.1015		
5/10/2016			<0.1015		
5/11/2016	<0.1015	<0.1015			
7/5/2016				<0.1015	
7/6/2016	<0.1015	<0.1015	<0.1015		<0.1015
8/23/2016				<0.1015	<0.1015
9/6/2016	<0.1015	<0.1015	<0.1015		
9/7/2016				<0.1015	<0.1015
11/8/2016		<0.1015	<0.1015	<0.1015	<0.1015
11/9/2016	<0.1015				
1/3/2017				0.0211 (J)	<0.1015
2/20/2017		<0.1015			<0.1015
2/21/2017	<0.1015			<0.1015	
2/22/2017			<0.1015		
5/30/2017		<0.1015			
5/31/2017	<0.1015		<0.1015	<0.1015	<0.1015
7/5/2017	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
9/5/2017				<0.1015	<0.1015
9/7/2017	<0.1015	<0.1015	<0.1015		
6/11/2018					
6/12/2018	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
10/22/2018		<0.1015			
10/23/2018			<0.1015	<0.1015	<0.1015
10/24/2018	<0.1015				
5/20/2019					
5/21/2019	<0.1015	<0.1015	<0.1015		
5/22/2019				<0.1015	<0.1015
9/3/2019	<0.1015	<0.1015			
9/4/2019			<0.1015	<0.1015	<0.1015
2/11/2020					
2/12/2020	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
9/8/2020	<0.1015				
9/9/2020		<0.1015	<0.1015	<0.1015	<0.1015
4/13/2021	<0.1015	<0.1015	<0.1015	<0.1015	<0.1015
10/4/2021		<0.1015	<0.1015	<0.1015	
10/5/2021	<0.1015				
10/6/2021					<0.1015
4/12/2022		<0.1015			<0.1015
4/13/2022	<0.1015		<0.1015	<0.1015	
8/16/2022		<0.1015	<0.1015	<0.1015	<0.1015
8/17/2022	<0.1015				
8/18/2022					



# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/3/2022 3:50 PM View: Appendix III - Interwell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-8	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016					
3/24/2016	0.02 (J)	0.132 (J)	0.039 (J)		
5/10/2016			0.085 (J)		
5/11/2016	0.062 (J)	0.176 (J)			
7/5/2016				0.072 (J)	
7/6/2016	0.051 (J)	0.167 (J)	0.075 (J)		0.062 (J)
8/23/2016				0.066 (J)	0.045 (J)
9/6/2016	0.037 (J)	0.153 (J)	0.058 (J)		
9/7/2016				0.062 (J)	0.042 (J)
11/8/2016		0.043 (J)	0.3 (U)	<0.125	<0.125
11/9/2016	0.3 (U)				
1/3/2017				<0.125	<0.125
2/20/2017		0.15			0.1
2/21/2017	0.1			0.1	
2/22/2017			0.04 (J)		
5/30/2017		0.14			
5/31/2017	0.1		0.04 (J)	0.06 (J)	0.1
7/5/2017	<0.125	0.13	0.04 (J)	0.04 (J)	<0.125
9/5/2017				0.06 (J)	<0.125
9/7/2017	<0.125	0.13	0.05 (J)		
2/5/2018			0.04 (J)		
2/6/2018	<0.125	0.15		0.06 (J)	
2/7/2018					<0.125
6/11/2018					
6/12/2018	<0.125	0.13	0.04 (J)	0.05 (J)	<0.125
10/22/2018		0.15			
10/23/2018			0.05 (J)	0.07 (J)	<0.125
10/24/2018	<0.125				
5/20/2019					
5/21/2019	<0.125	0.109	0.0595 (J)		
5/22/2019				0.0601 (J)	<0.125
9/3/2019	<0.125	0.123			
9/4/2019			0.0555 (J)	0.0703 (J)	<0.125
2/11/2020					
2/12/2020	<0.125	0.108	<0.125	<0.125	<0.125
9/8/2020	0.0617 (J)				
9/9/2020		0.14	0.0655 (J)	0.0847 (J)	<0.125
4/13/2021	<0.125	0.119	0.0633 (J)	<0.125	<0.125
10/4/2021		0.134	0.0748 (J)	0.0838 (J)	
10/5/2021	<0.125				
10/6/2021					<0.125
4/12/2022		0.0621 (J)			<0.125
4/13/2022	<0.125		<0.125	<0.125	
8/16/2022		0.0979 (J)	0.0614 (J)	<0.125	<0.125
8/17/2022	<0.125				
8/18/2022					



# Prediction Limit

Constituent: pH (pH) Analysis Run 10/3/2022 3:50 PM View: Appendix III - Interwell  
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-8	GN-GSA-MW-13	GN-GSA-MW-14S..GN-GSA-MW-15 ...	
3/23/2016					
3/24/2016	6.95	7.45	7.14		
5/10/2016			7.17		
5/11/2016	7.07	7.48			
7/5/2016				7.44	
7/6/2016	7.13	7.46	7.19		6.1
8/23/2016				7.47	5.87
9/6/2016	7.1	7.44	7.18		
9/7/2016				7.51	5.92
11/8/2016		7.37	7.18	7.37	5.91
11/9/2016	7.1				
1/3/2017				7.37	5.93
2/20/2017		7.36			5.91
2/21/2017	7			7.41	
2/22/2017			7.02		
5/30/2017		7.38			
5/31/2017	7.01		7.07	7.47	6
7/5/2017	7.07	7.44	7	7.5	6
9/5/2017				7.39	5.9
9/7/2017	7.01	7.41	7.02		
2/5/2018			7.12		
2/6/2018	7.09	7.41		7.47	
2/7/2018					5.86
6/11/2018					
6/12/2018	7.07	7.4	7.09	7.53	6.05
10/22/2018		7.33			
10/23/2018			7.09	7.4	5.84
10/24/2018	7.14				
5/20/2019					
5/21/2019	6.98	7.31	7.05		
5/22/2019				7.43	5.81
9/3/2019	6.67	7.46			
9/4/2019			6.71	7.45	5.67
2/11/2020					
2/12/2020	7.03	7.51	7.09	7.47	5.72
9/8/2020	5.9				
9/9/2020		7.54	6.95	7.32	5.71
4/13/2021	7.22	7.7	7.17	7.33	5.84
10/4/2021		7.82	6.95	7.21	
10/5/2021	7.12				
10/6/2021					5.64
4/12/2022		7.22			5.25
4/13/2022	6.85		6.84	7.4	
8/16/2022		6.98	6.92	6.96	5.37
8/17/2022	6.97				
8/18/2022					

FIGURE F.

# Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 3:53 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-1	2.203	108	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-10	3.06	110	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-12	4.193	120	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-15 (bg)	-0.775	-135	-74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-3 (bg)	-9.218	-135	-74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-5	6.84	133	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-7	2.129	106	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-11	1.864	133	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-14S (bg)	-0.4137	-120	-74	Yes	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-15 (bg)	-0.2784	-83	-74	Yes	19	5.263	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-15 (bg)	-0.06556	-121	-81	Yes	20	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-3 (bg)	-0.08873	-92	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-14S (bg)	-1.419	-105	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-0.2951	-75	-74	Yes	19	5.263	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-3 (bg)	-2.734	-153	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-5	20.53	131	74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-8	0.556	111	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-14S (bg)	-3.544	-79	-74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-15 (bg)	-3.792	-106	-74	Yes	19	5.263	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-3 (bg)	-27.73	-147	-74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-5	37.14	126	74	Yes	19	0	n/a	n/a	0.01	NP

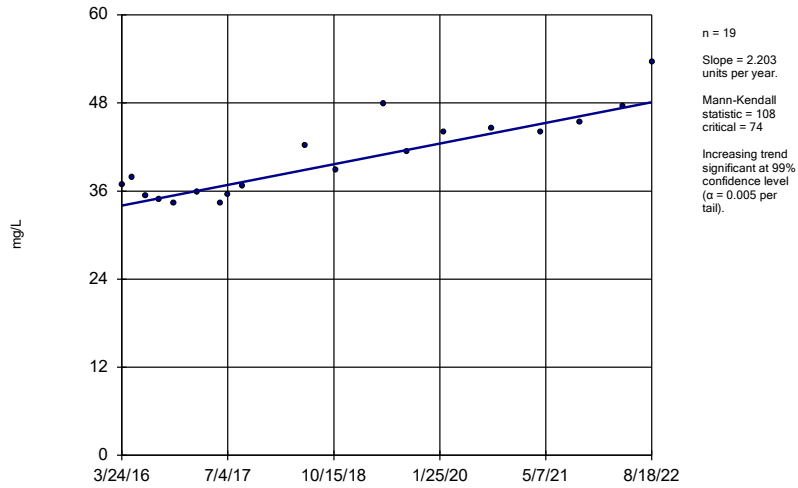


# Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 3:53 PM

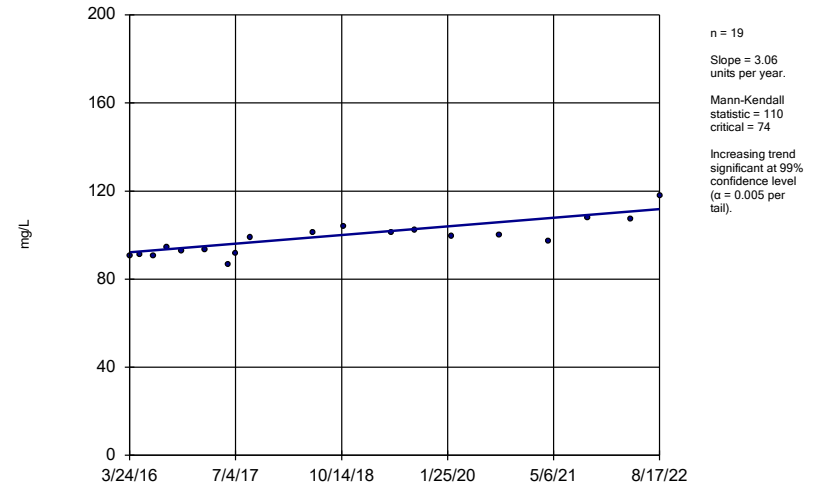
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>2.203</b>	<b>108</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-10</b>	<b>3.06</b>	<b>110</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-12</b>	<b>4.193</b>	<b>120</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-14S (bg)	0	-1	-74	No	19	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.775</b>	<b>-135</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-2 (bg)	1.61	68	74	No	19	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-9.218</b>	<b>-135</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>6.84</b>	<b>133</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>GN-GSA-MW-7</b>	<b>2.129</b>	<b>106</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	GN-GSA-MW-9	0.7442	17	74	No	19	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-11</b>	<b>1.864</b>	<b>133</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-0.4137</b>	<b>-120</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.2784</b>	<b>-83</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>5.263</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	GN-GSA-MW-2 (bg)	0.009371	6	74	No	19	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-3 (bg)	-0.08132	-70	-74	No	19	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-1	0	0	81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-14S (bg)	0.004555	44	81	No	20	30	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-15 (bg)	0	70	81	No	20	75	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-2 (bg)	0.002307	50	81	No	20	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-3 (bg)	0	13	81	No	20	15	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-14S (bg)	-0.02015	-58	-81	No	20	0	n/a	n/a	0.01	NP
<b>pH (pH)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.06556</b>	<b>-121</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (pH)	GN-GSA-MW-2 (bg)	-0.01798	-70	-81	No	20	0	n/a	n/a	0.01	NP
<b>pH (pH)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-0.08873</b>	<b>-92</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (pH)	GN-GSA-MW-6	-0.0226	-53	-81	No	20	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-1.419</b>	<b>-105</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-0.2951</b>	<b>-75</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>5.263</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GN-GSA-MW-2 (bg)	0.2537	51	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-2.734</b>	<b>-153</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>20.53</b>	<b>131</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>GN-GSA-MW-8</b>	<b>0.556</b>	<b>111</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-14S (bg)</b>	<b>-3.544</b>	<b>-79</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-15 (bg)</b>	<b>-3.792</b>	<b>-106</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>5.263</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GN-GSA-MW-2 (bg)	-1.575	-39	-74	No	19	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-3 (bg)</b>	<b>-27.73</b>	<b>-147</b>	<b>-74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>TDS (mg/L)</b>	<b>GN-GSA-MW-5</b>	<b>37.14</b>	<b>126</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

Sen's Slope Estimator  
GN-GSA-MW-1



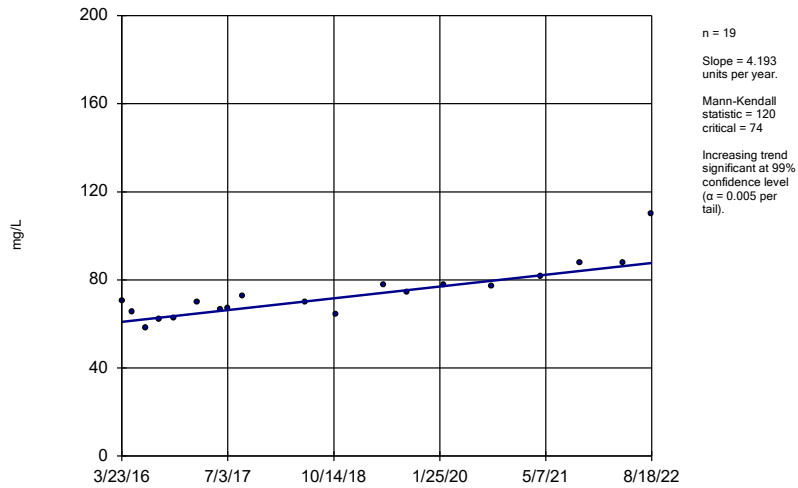
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-10



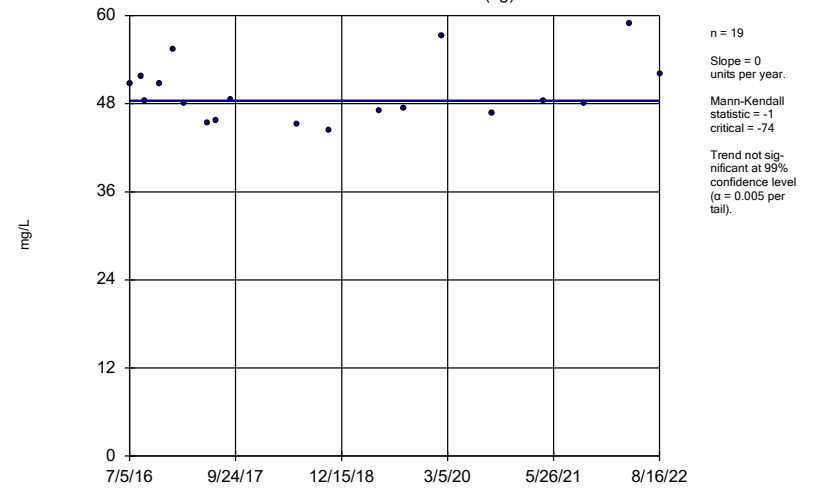
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-12



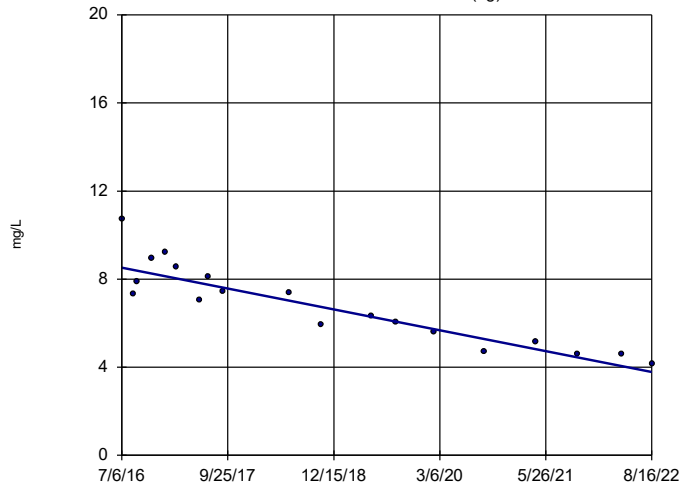
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-14S (bg)



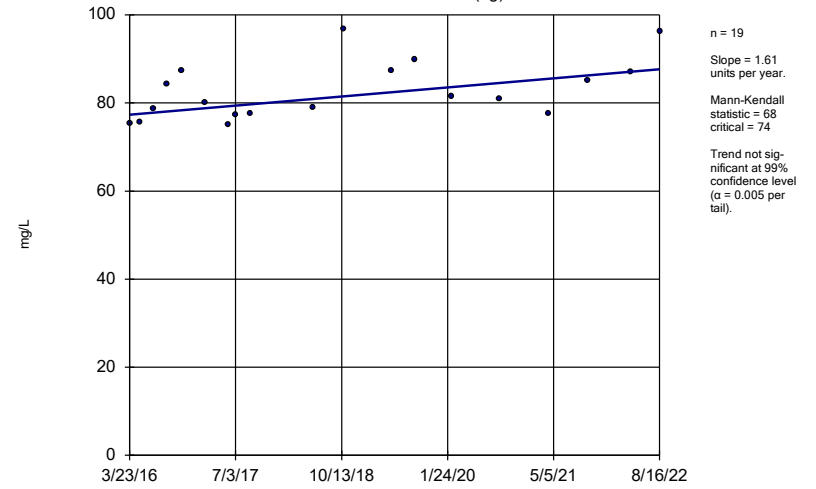
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-15 (bg)



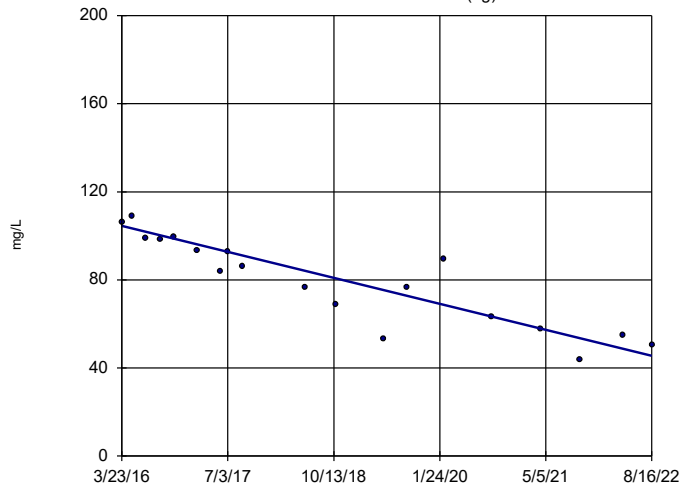
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-2 (bg)



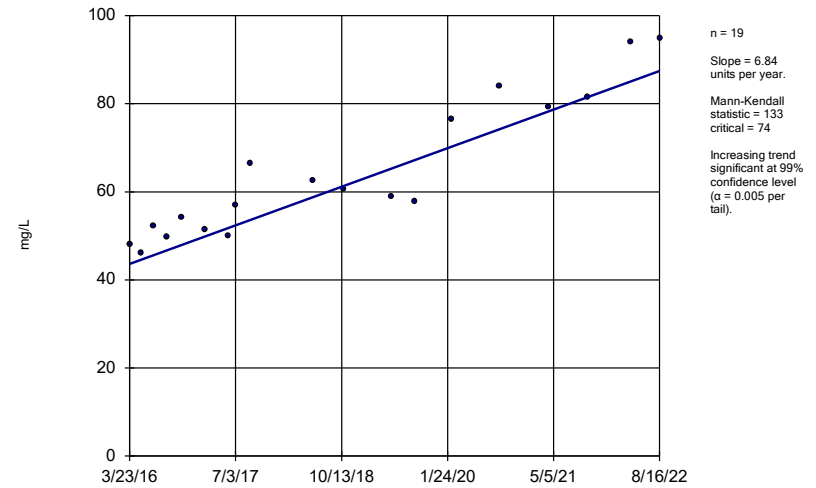
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-3 (bg)



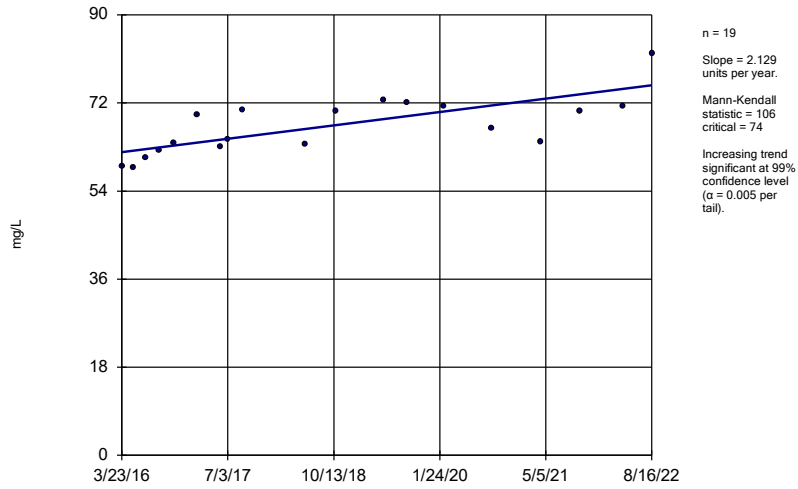
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-5



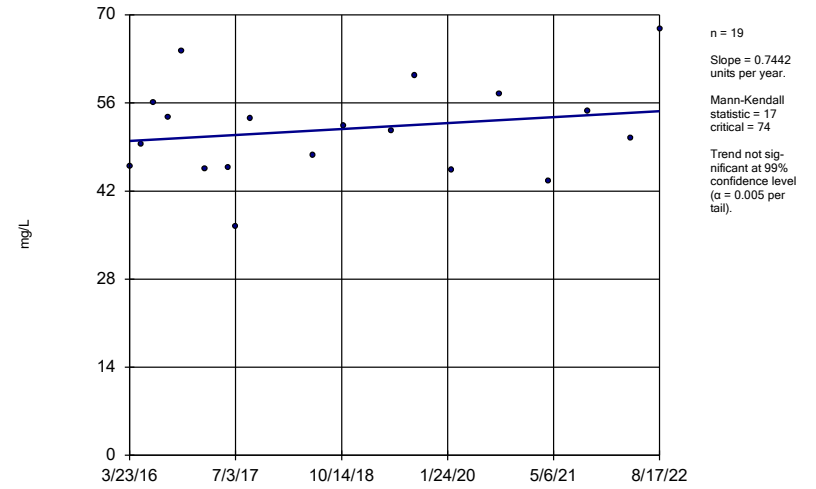
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-7



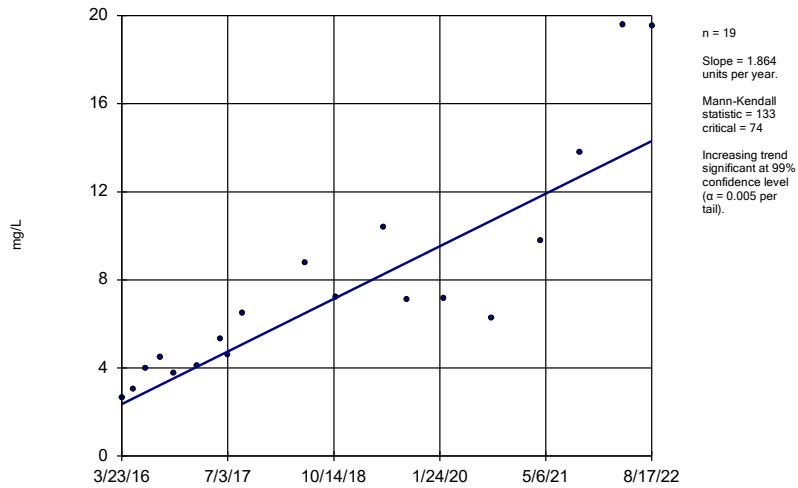
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-9



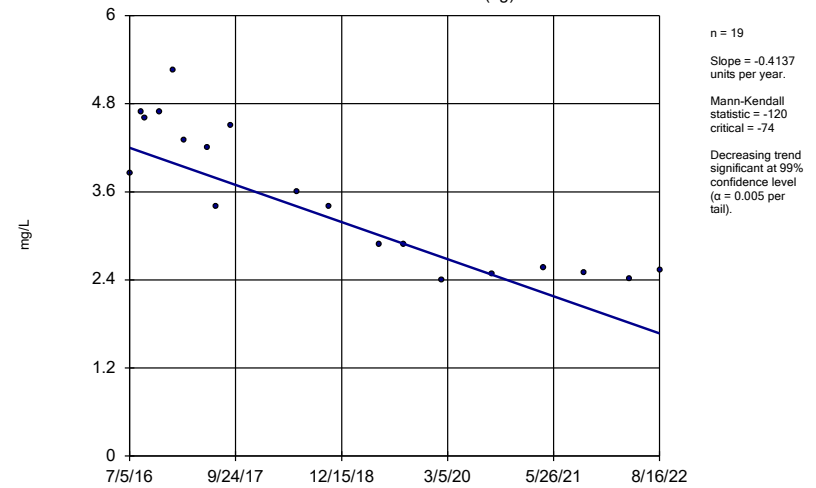
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-11



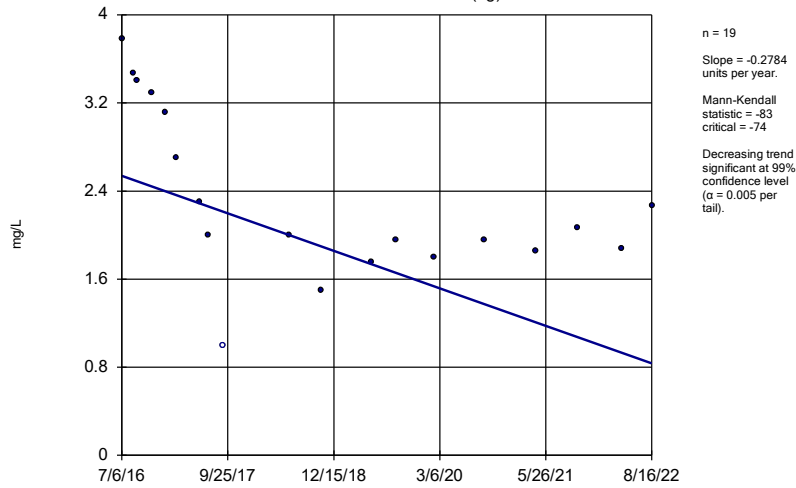
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-14S (bg)



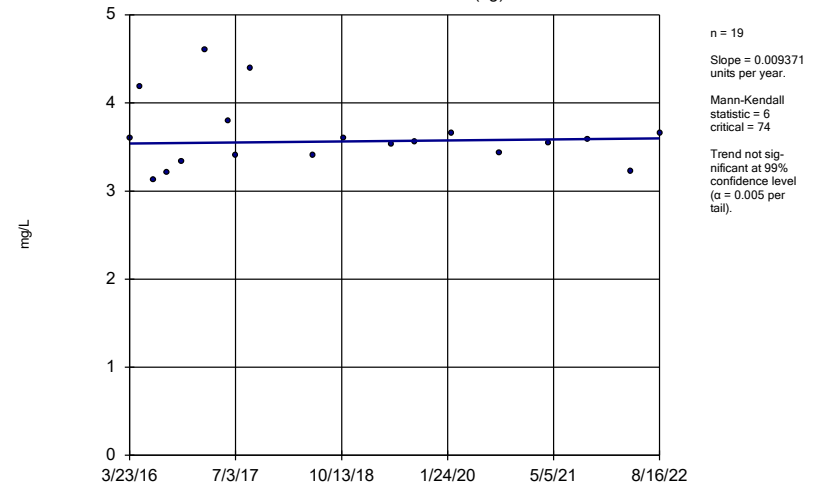
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
 GN-GSA-MW-15 (bg)



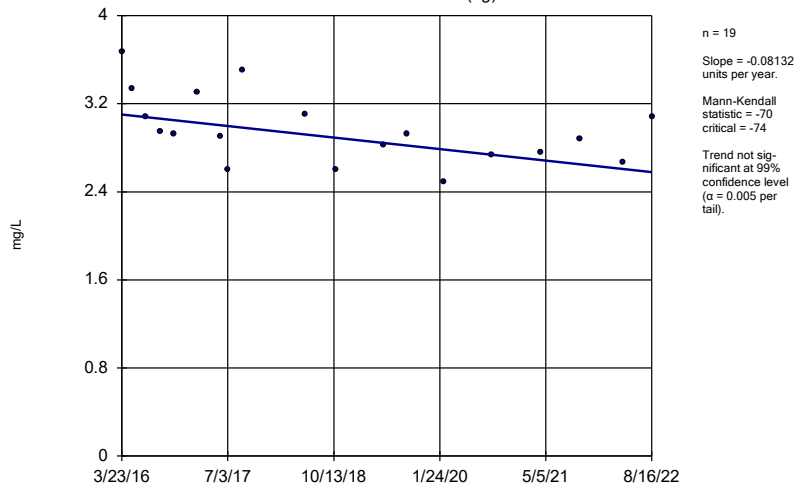
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
 GN-GSA-MW-2 (bg)



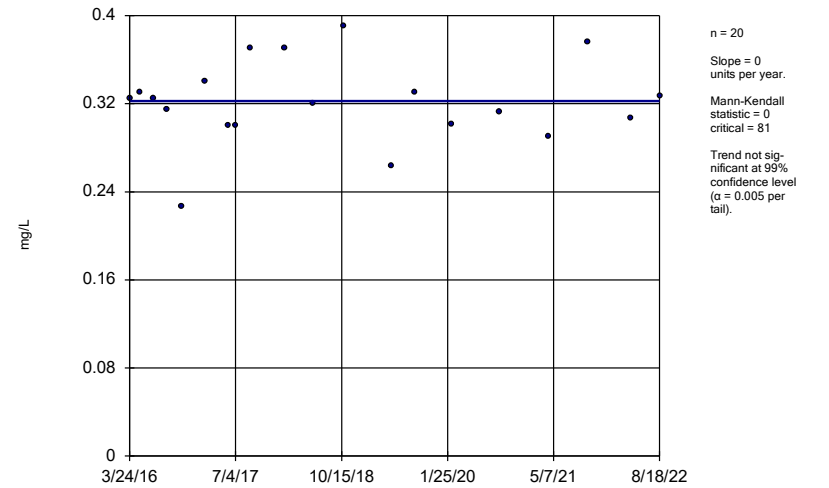
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
 GN-GSA-MW-3 (bg)



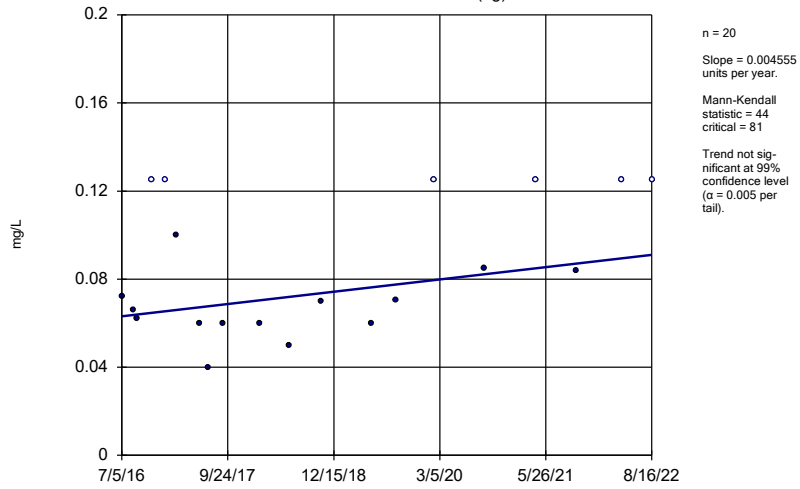
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 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
 GN-GSA-MW-1



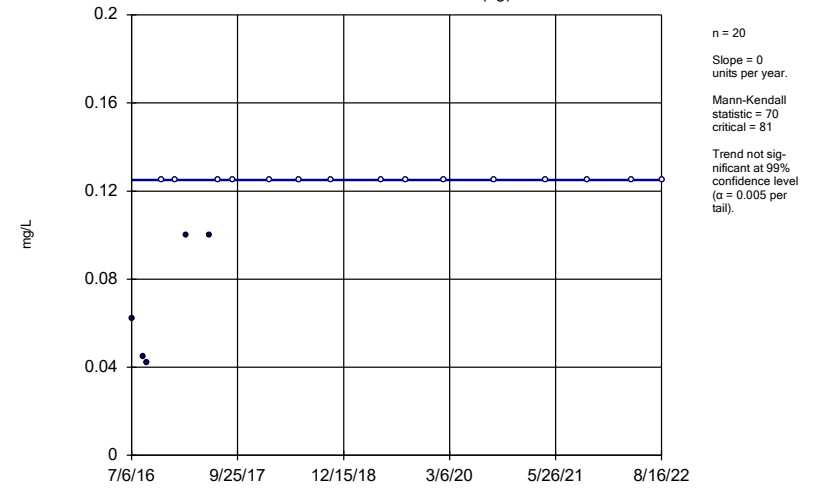
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 Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-14S (bg)



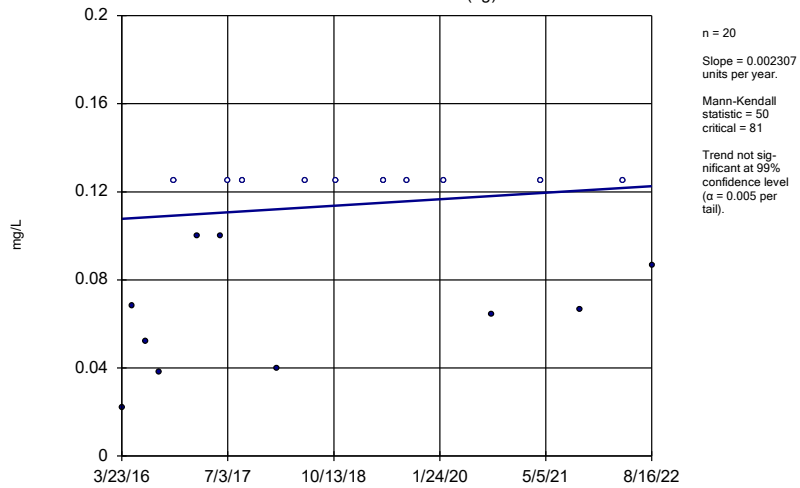
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-15 (bg)



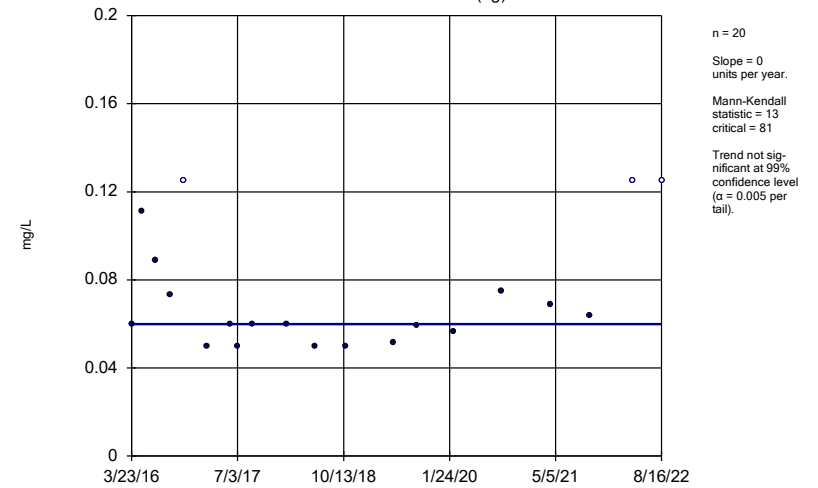
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Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-2 (bg)



Constituent: Fluoride Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

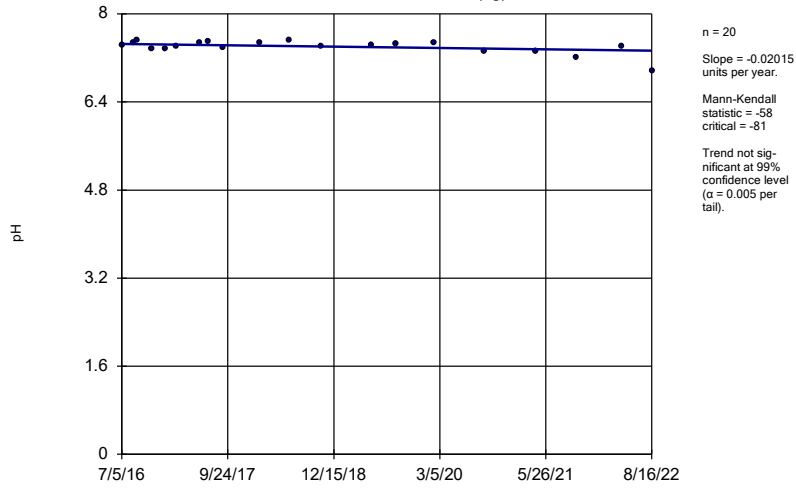
### Sen's Slope Estimator GN-GSA-MW-3 (bg)



Constituent: Fluoride Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator

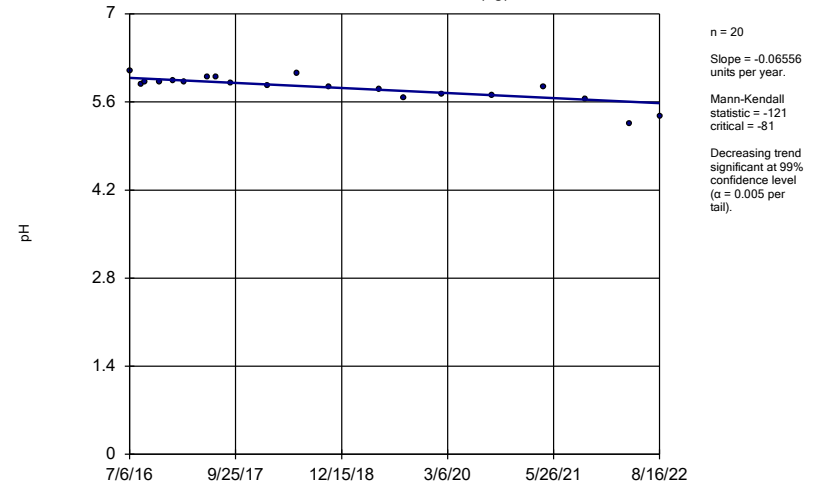
GN-GSA-MW-14S (bg)



Constituent: pH Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator

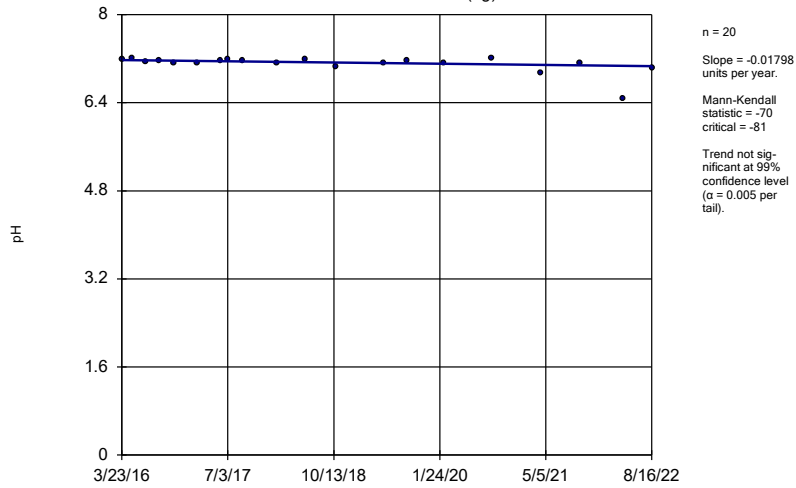
GN-GSA-MW-15 (bg)



Constituent: pH Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator

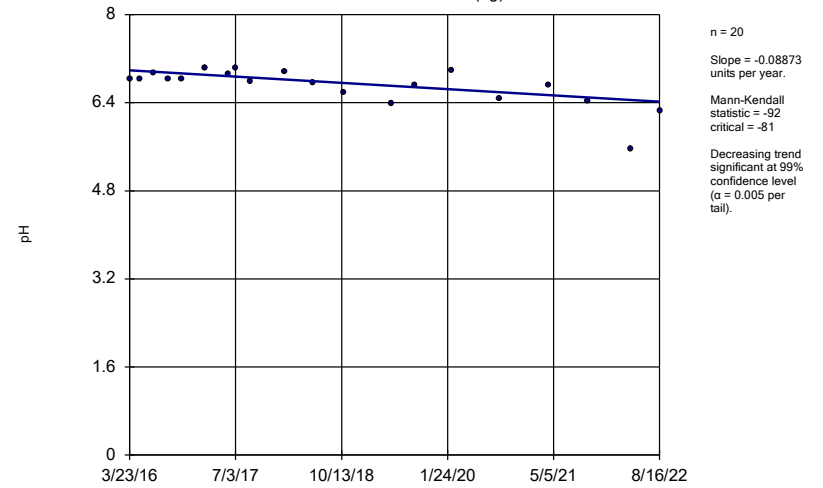
GN-GSA-MW-2 (bg)



Constituent: pH Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator

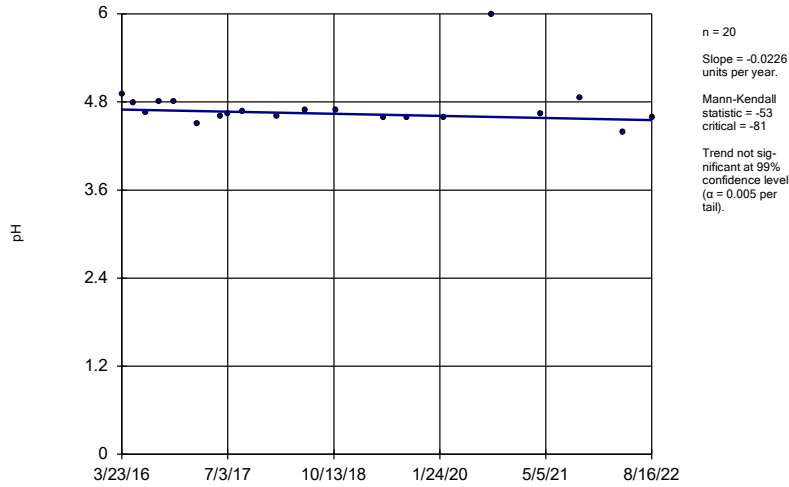
GN-GSA-MW-3 (bg)



Constituent: pH Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator

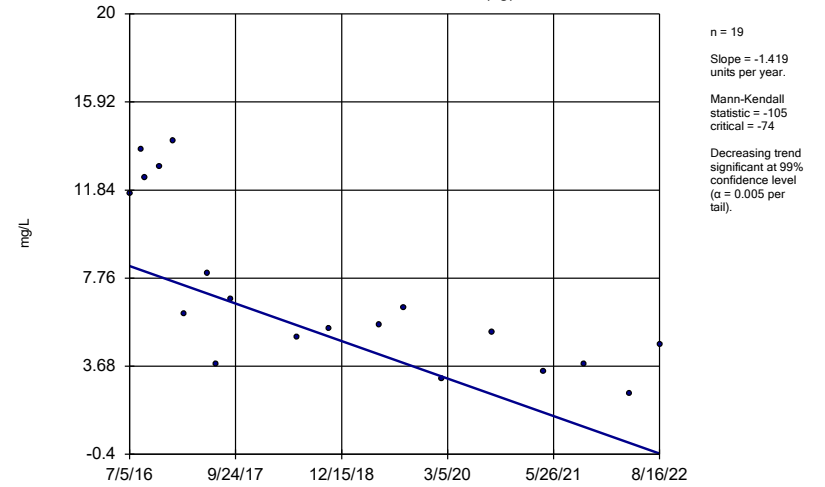
GN-GSA-MW-6



Constituent: pH Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator

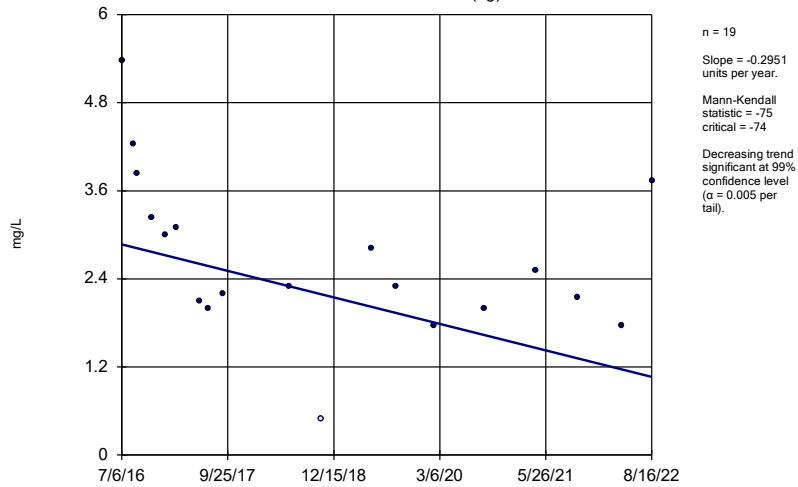
GN-GSA-MW-14S (bg)



Constituent: Sulfate Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator

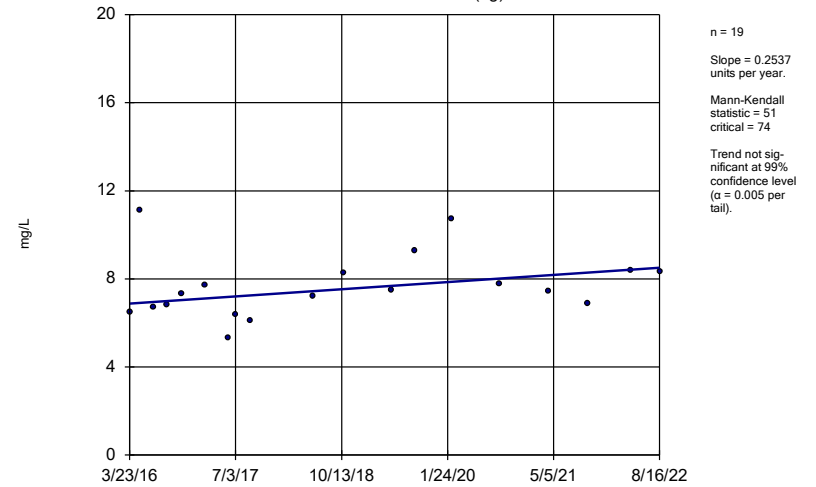
GN-GSA-MW-15 (bg)



Constituent: Sulfate Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator

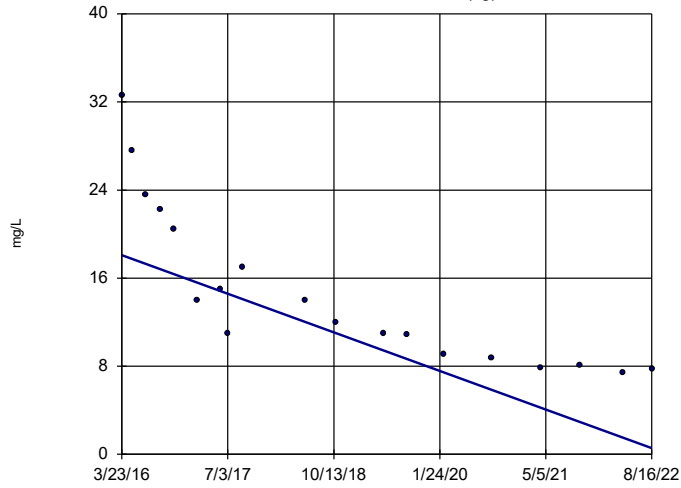
GN-GSA-MW-2 (bg)



Constituent: Sulfate Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

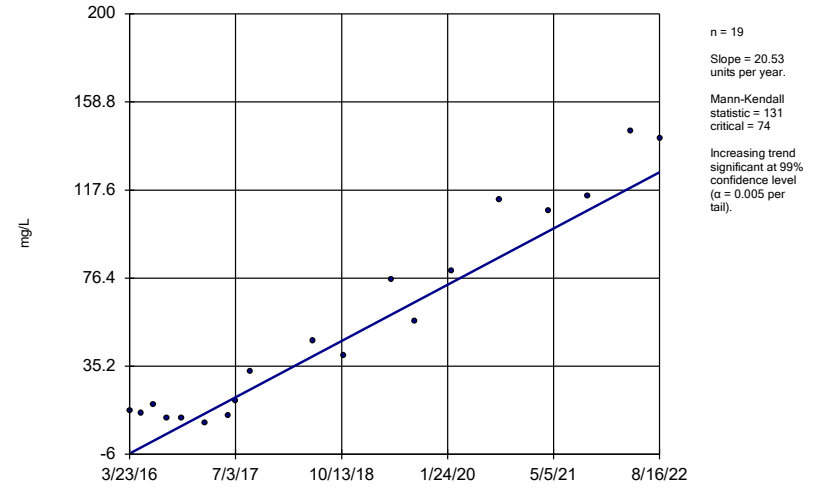


Sen's Slope Estimator  
GN-GSA-MW-3 (bg)



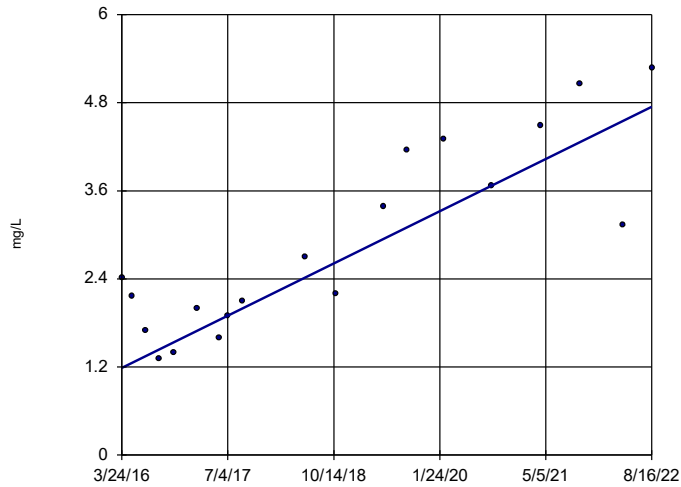
Constituent: Sulfate Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-5



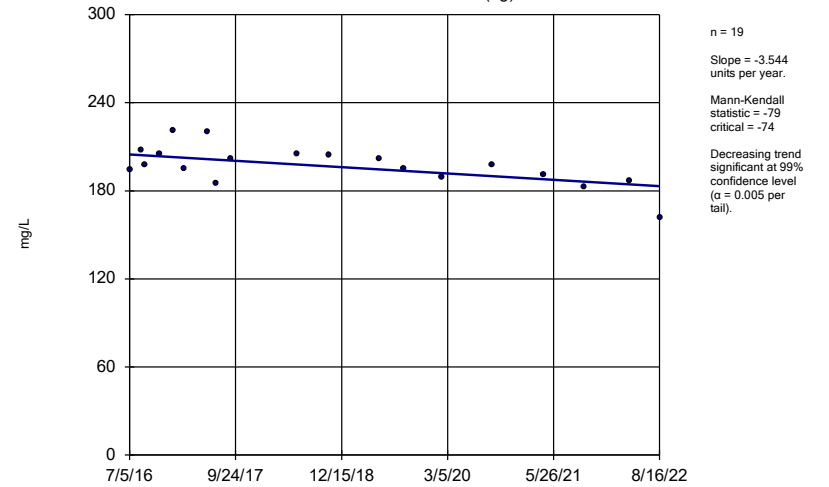
Constituent: Sulfate Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-8



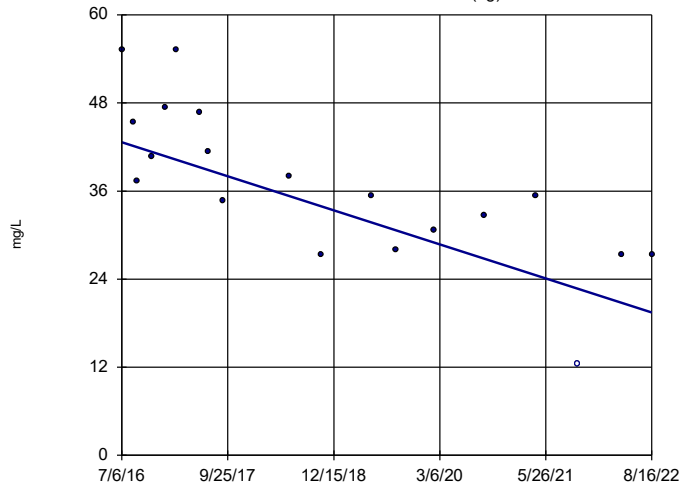
Constituent: Sulfate Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator  
GN-GSA-MW-14S (bg)



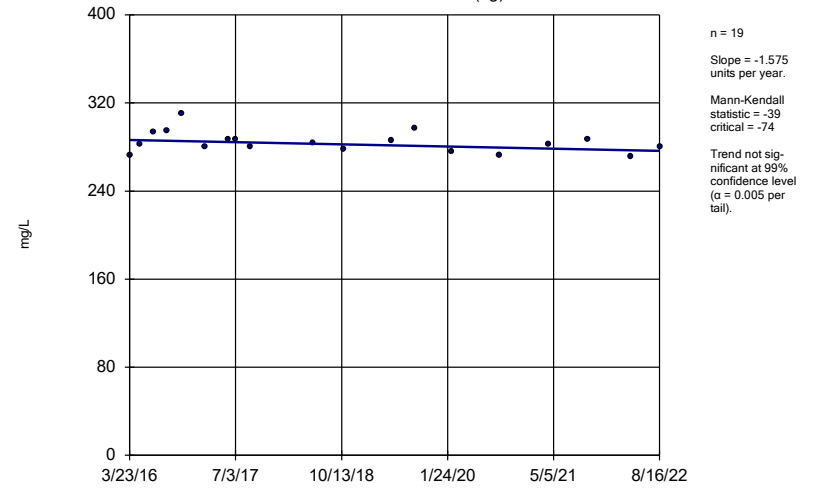
Constituent: TDS Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-15 (bg)



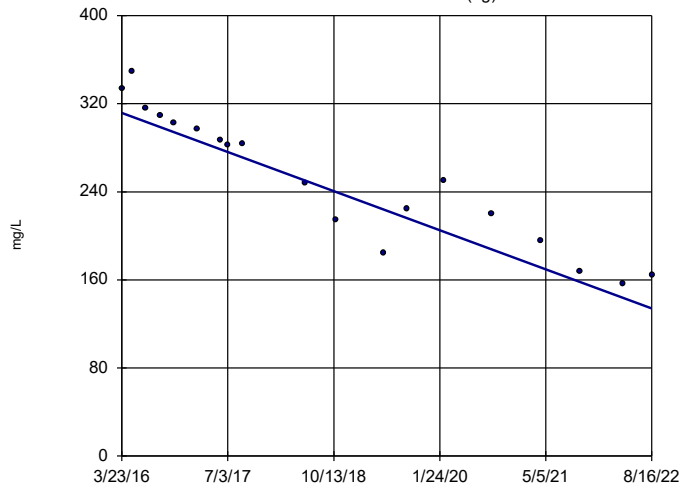
Constituent: TDS Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-2 (bg)



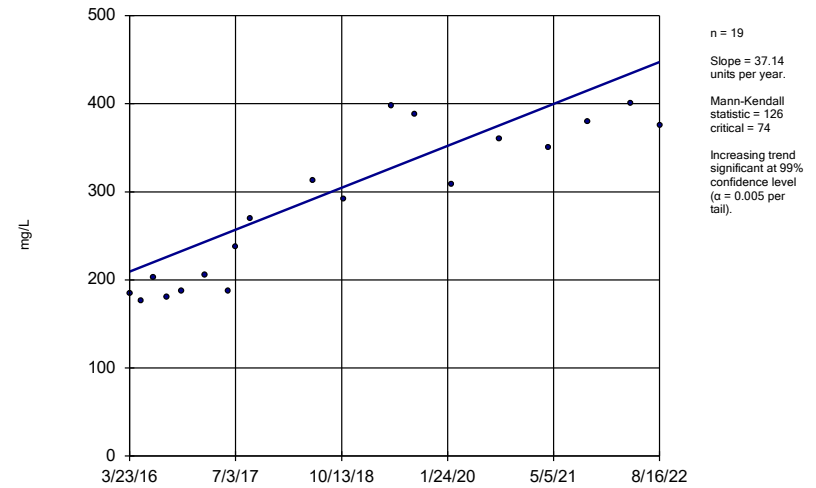
Constituent: TDS Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-3 (bg)



Constituent: TDS Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Sen's Slope Estimator GN-GSA-MW-5



Constituent: TDS Analysis Run 10/3/2022 3:51 PM View: Appendix III - Trend Tests  
Plant Gaston Client: Southern Company Data: Gaston GSA

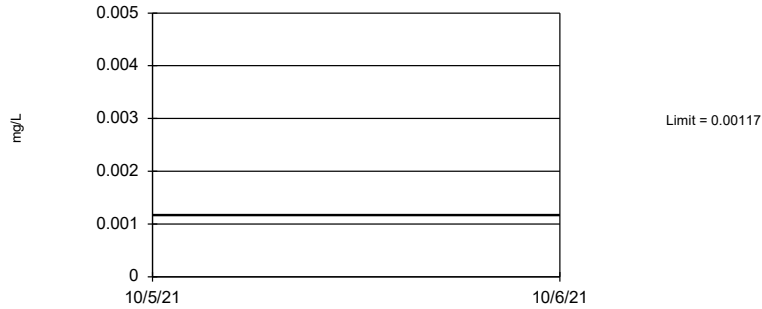
FIGURE G.

# Upper Tolerance Limits - Summary Table

Plant Gaston    Client: Southern Company    Data: Gaston GSA    Printed 1/11/2022, 10:38 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq 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)	n/a	0.00117	n/a	n/a	n/a	68	n/a	n/a	95.59	n/a	n/a	0.03056	NP Inter
Arsenic (mg/L)	n/a	0.00032	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Barium (mg/L)	n/a	0.0622	n/a	n/a	n/a	68	n/a	n/a	0	n/a	n/a	0.03056	NP Inter
Beryllium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Cadmium (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Chromium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Cobalt (mg/L)	n/a	0.00313	n/a	n/a	n/a	68	n/a	n/a	94.12	n/a	n/a	0.03056	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	2.36	n/a	n/a	n/a	68	n/a	n/a	2.941	n/a	n/a	0.03056	NP Inter
Fluoride (mg/L)	n/a	0.111	n/a	n/a	n/a	72	n/a	n/a	37.5	n/a	n/a	0.02489	NP Inter
Lead (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Lithium (mg/L)	n/a	0.02	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Molybdenum (mg/L)	n/a	0.00046	n/a	n/a	n/a	68	n/a	n/a	92.65	n/a	n/a	0.03056	NP Inter
Selenium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter
Thallium (mg/L)	n/a	0.000228	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter

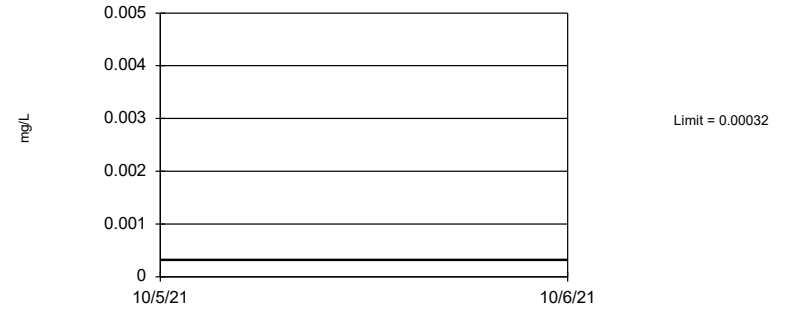
Tolerance Limit  
Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 95.59% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Antimony Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

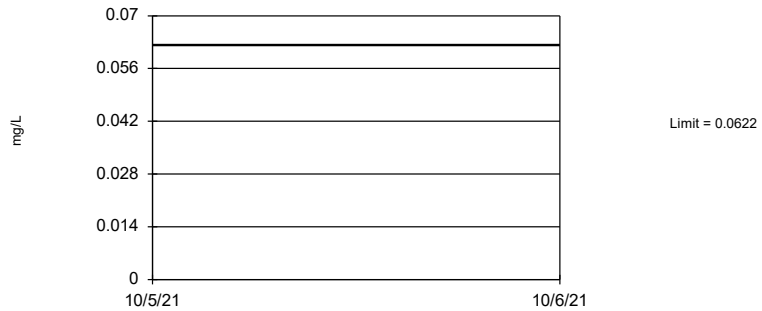
Tolerance Limit  
Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 89.71% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Arsenic Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit  
Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Barium Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

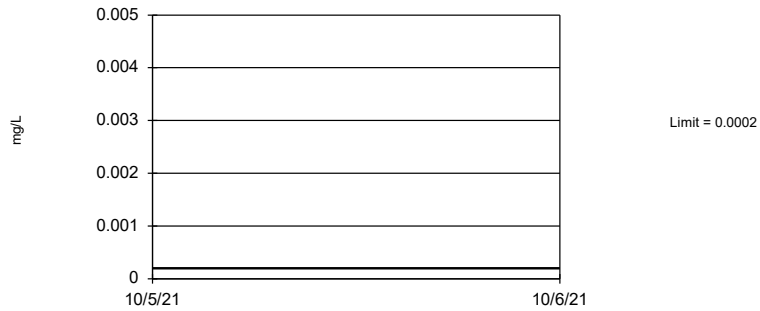
Tolerance Limit  
Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Beryllium Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Tolerance Limit Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Cadmium Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

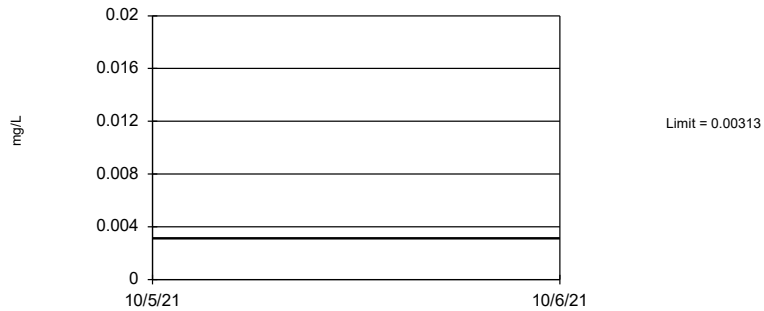
### Tolerance Limit Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 89.71% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Chromium Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Tolerance Limit Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 94.12% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Cobalt Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

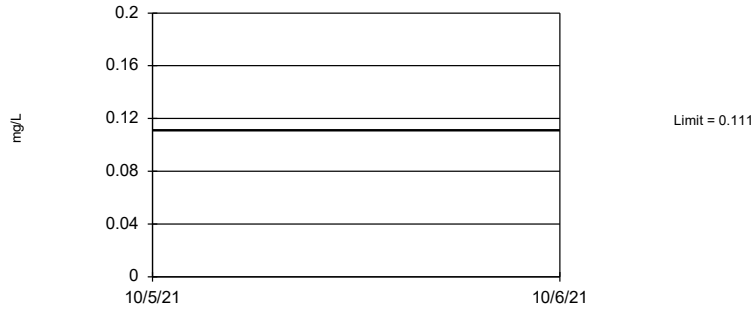
### Tolerance Limit Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 2.941% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Combined Radium 226 + 228 Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

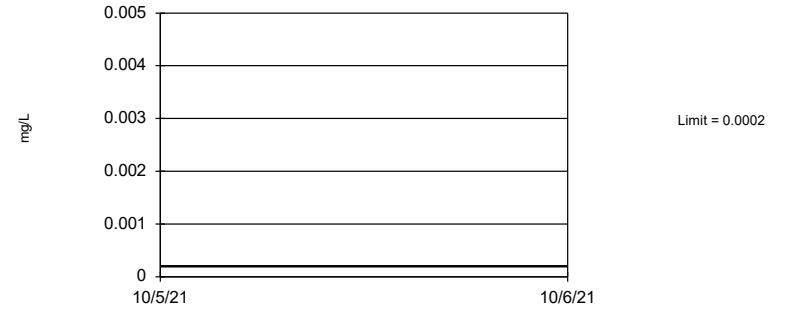
### Tolerance Limit Interwell Non-parametric



NP test selected by user. Limit is highest of 72 background values. 37.5% NDs. 93.95% coverage at alpha=0.01; 95.9% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.02489.

Constituent: Fluoride Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Tolerance Limit Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Lead Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

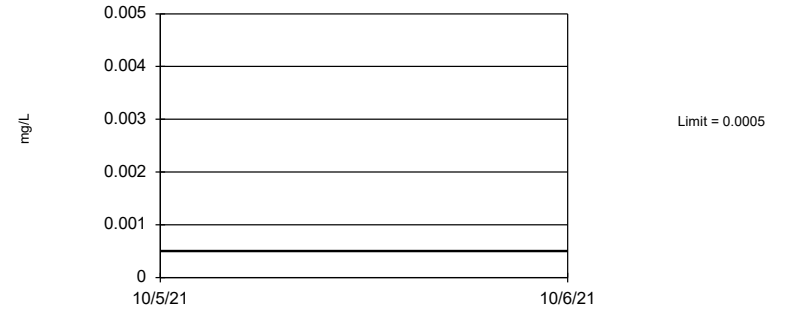
### Tolerance Limit Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Lithium Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

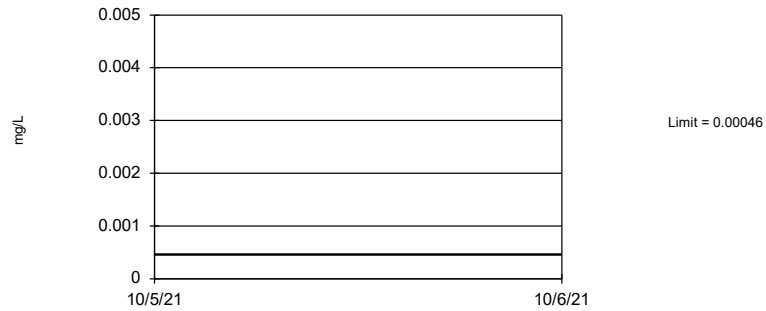
### Tolerance Limit Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Mercury Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Tolerance Limit Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 92.65% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Molybdenum Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

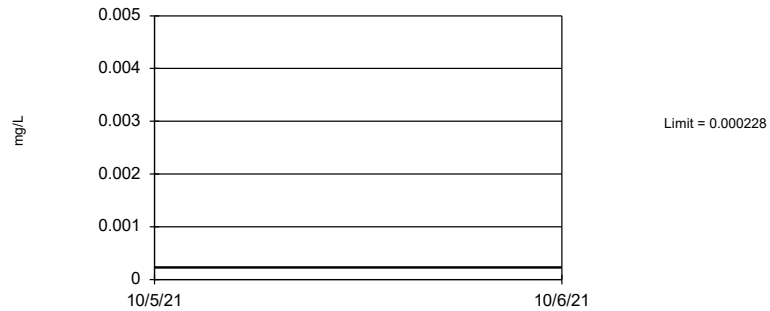
### Tolerance Limit Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 98.53% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Selenium Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Tolerance Limit Interwell Non-parametric



NP test selected by user. Limit is highest of 68 background values. 98.53% NDs. 93.55% coverage at alpha=0.01; 95.51% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.03056.

Constituent: Thallium Analysis Run 1/11/2022 10:38 PM View: Appendix IV - UTLs  
Plant Gaston Client: Southern Company Data: Gaston GSA



FIGURE H.

<b>GASTON GYPSUM POND GWPS</b>			
<b>Analyte</b>	<b>Units</b>	<b>Background</b>	<b>GWPS</b>
Antimony	mg/L	0.00117	0.006
Arsenic	mg/L	0.00032	0.01
Barium	mg/L	0.0622	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.00102	0.1
Cobalt	mg/L	0.00313	0.006
Combined Radium-226/228	pCi/L	2.36	5
Fluoride	mg/L	0.111	4
Lead	mg/L	0.0002	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00046	0.1
Selenium	mg/L	0.00102	0.05
Thallium	mg/L	0.000228	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2021.

FIGURE I.

# Confidence Intervals - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 4:19 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	GN-GSA-MW-1	2.586	2.004	2	n/a	Yes	8	2.295	0.2746	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 4:19 PM

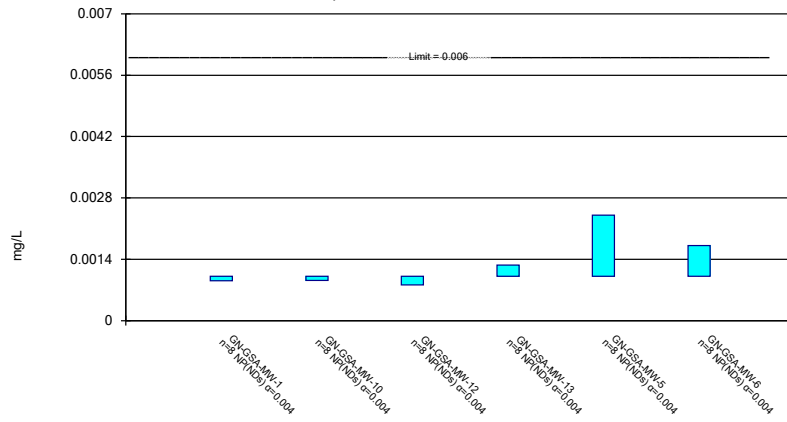
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.001015	0.000909	0.006	n/a	No	8	0.001002	0.00003748	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.001015	0.000916	0.006	n/a	No	8	0.001003	0.000035	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.001015	0.000813	0.006	n/a	No	8	0.0009898	0.00007142	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.00127	0.001015	0.006	n/a	No	8	0.001047	0.00009016	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-5	0.00241	0.001015	0.006	n/a	No	8	0.001189	0.0004932	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.00171	0.001015	0.006	n/a	No	8	0.001102	0.0002457	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.00123	0.001015	0.006	n/a	No	8	0.001042	0.00007601	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.00106	0.001015	0.006	n/a	No	8	0.001021	0.00001591	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.00112	0.001015	0.006	n/a	No	8	0.001028	0.00003712	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.006341	0.002522	0.01	n/a	No	8	0.004431	0.001802	0	None	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-10	0.000203	0.00007	0.01	n/a	No	8	0.0001719	0.00005779	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.000203	0.00009	0.01	n/a	No	8	0.0001518	0.00005514	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-12	0.00033	0.000189	0.01	n/a	No	8	0.0002214	0.00004536	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-13	0.00348	0.00012	0.01	n/a	No	8	0.0005836	0.001171	37.5	None	No	0.004	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-5	0.002162	0.0002509	0.01	n/a	No	8	0.00118	0.001084	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-6	0.000203	0.00008	0.01	n/a	No	8	0.000163	0.00005583	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.0005823	0.0001943	0.01	n/a	No	8	0.0003916	0.0002667	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-8	0.001344	0.001191	0.01	n/a	No	8	0.001268	0.00007186	0	None	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-9	0.0002016	0.00008981	0.01	n/a	No	8	0.0001819	0.00004747	50	Kaplan-Meier	x^2	0.01	Param.
<b>Barium (mg/L)</b>	<b>GN-GSA-MW-1</b>	<b>2.586</b>	<b>2.004</b>	<b>2</b>	<b>n/a</b>	<b>Yes</b>	<b>8</b>	<b>2.295</b>	<b>0.2746</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Barium (mg/L)	GN-GSA-MW-10	0.03865	0.03312	2	n/a	No	8	0.03589	0.002609	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.01245	0.00438	2	n/a	No	8	0.008303	0.004187	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GN-GSA-MW-12	0.02496	0.01911	2	n/a	No	8	0.02204	0.002758	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.0697	0.0369	2	n/a	No	8	0.04414	0.01066	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-5	0.07521	0.04612	2	n/a	No	8	0.06066	0.01372	0	None	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-6	0.0214	0.0156	2	n/a	No	8	0.01743	0.001828	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-7	0.0256	0.016	2	n/a	No	8	0.01853	0.003156	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-8	0.0314	0.0257	2	n/a	No	8	0.02739	0.002004	0	None	No	0.004	NP (normality)
Barium (mg/L)	GN-GSA-MW-9	0.02581	0.02211	2	n/a	No	8	0.02396	0.001748	0	None	No	0.01	Param.
Cadmium (mg/L)	GN-GSA-MW-10	0.0002	0.00008	0.005	n/a	No	8	0.0001779	0.00004429	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.001015	0.00021	0.1	n/a	No	8	0.0009144	0.0002846	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.001015	0.00023	0.1	n/a	No	8	0.0008233	0.0003552	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.001015	0.0003	0.1	n/a	No	8	0.0009256	0.0002528	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-12	0.001015	0.00021	0.1	n/a	No	8	0.0008238	0.0003548	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.0009794	0.0003691	0.1	n/a	No	8	0.0008846	0.0005167	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GN-GSA-MW-5	0.001015	0.000271	0.1	n/a	No	8	0.0007395	0.0003803	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.001015	0.00022	0.1	n/a	No	8	0.0007253	0.0004	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.001015	0.000361	0.1	n/a	No	8	0.0007995	0.0003027	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.001015	0.000291	0.1	n/a	No	8	0.0006885	0.0003513	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GN-GSA-MW-9	0.001015	0.00021	0.1	n/a	No	8	0.000822	0.0003578	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.003081	0.001653	0.006	n/a	No	8	0.002312	0.0009354	12.5	None	x^2	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-12	0.00042	0.00016	0.006	n/a	No	8	0.0002367	0.00008344	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-13	0.0002	0.000088	0.006	n/a	No	8	0.0001682	0.00004817	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.004408	0.0003572	0.006	n/a	No	8	0.002382	0.002043	25	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-6	0.000713	0.0002	0.006	n/a	No	8	0.0004381	0.0002552	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-7	0.000978	0.0001861	0.006	n/a	No	8	0.0006106	0.0006633	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-8	0.0002	0.00007	0.006	n/a	No	8	0.0001582	0.00004924	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-9	0.00041	0.0000816	0.006	n/a	No	8	0.0002029	0.00009462	62.5	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.773	0.8922	5	n/a	No	8	1.323	0.4722	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	1.941	0.2053	5	n/a	No	8	1.122	1.636	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.583	0.0765	5	n/a	No	8	0.7884	1.112	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	1.404	0.2217	5	n/a	No	8	0.8128	0.576	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	1.623	0.2398	5	n/a	No	8	0.9659	1.222	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	0.9981	0.08236	5	n/a	No	8	0.5403	0.432	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	1.242	0.07461	5	n/a	No	8	0.6585	0.5509	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.8842	0.1152	5	n/a	No	8	0.4797	0.3731	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.841	0.09728	5	n/a	No	8	0.4692	0.3509	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	1.072	0.1691	5	n/a	No	8	0.6204	0.4258	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 10/3/2022, 4:19 PM

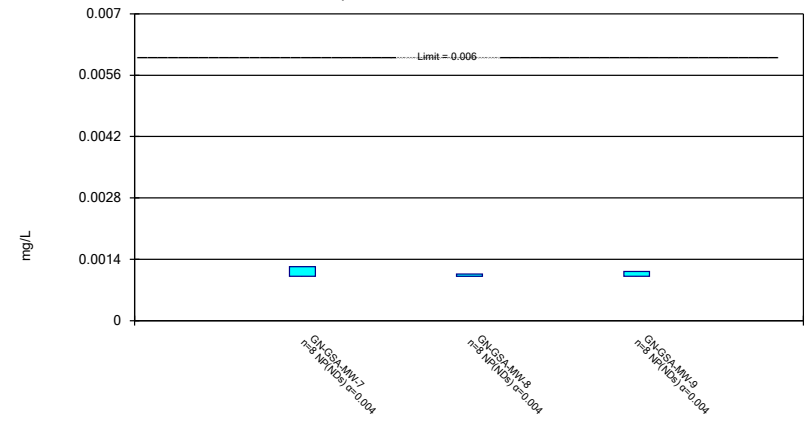
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Lower Compl.	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GN-GSA-MW-1	0.3483	0.2787	4	n/a	No	8	0.3135	0.03287	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-10	0.125	0.0617	4	n/a	No	8	0.1171	0.02238	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GN-GSA-MW-12	0.125	0.0547	4	n/a	No	8	0.09328	0.03414	50	None	No	0.004	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.125	0.0555	4	n/a	No	8	0.07875	0.02908	25	None	No	0.004	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-5	0.125	0.0842	4	n/a	No	8	0.1163	0.01643	75	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GN-GSA-MW-7	0.1243	0.07682	4	n/a	No	8	0.1006	0.0224	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1374	0.08581	4	n/a	No	8	0.1116	0.02435	0	None	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.125	0.0526	4	n/a	No	8	0.09565	0.03418	50	None	No	0.004	NP (normality)
Lead (mg/L)	GN-GSA-MW-11	0.000203	0.000078	0.015	n/a	No	8	0.0001758	0.00005118	75	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.00228	0.000203	0.015	n/a	No	8	0.0004626	0.0007343	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.0004	0.000203	0.015	n/a	No	8	0.0002681	0.00007555	50	None	No	0.004	NP (normality)
Lead (mg/L)	GN-GSA-MW-9	0.000203	0.00011	0.015	n/a	No	8	0.0001914	0.00003288	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.02	0.00953	0.04	n/a	No	8	0.01357	0.005326	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-1	0.004843	0.003184	0.1	n/a	No	8	0.004014	0.0007825	0	None	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-12	0.01	0.000207	0.1	n/a	No	8	0.005143	0.005192	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-13	0.01	0.00016	0.1	n/a	No	8	0.005092	0.005247	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-5	0.01	0.00009	0.1	n/a	No	8	0.005054	0.005287	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-7	0.01	0.000232	0.1	n/a	No	8	0.005128	0.005208	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GN-GSA-MW-8	0.00411	0.003195	0.1	n/a	No	8	0.003653	0.0004318	0	None	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.01	0.000207	0.1	n/a	No	8	0.005134	0.005202	50	None	No	0.004	NP (normality)

Non-Parametric Confidence Interval  
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 10/3/2022 4:16 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

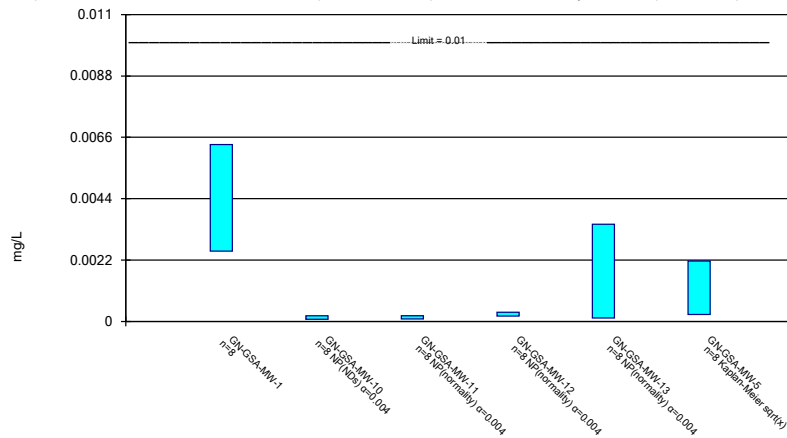
Non-Parametric Confidence Interval  
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 10/3/2022 4:16 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

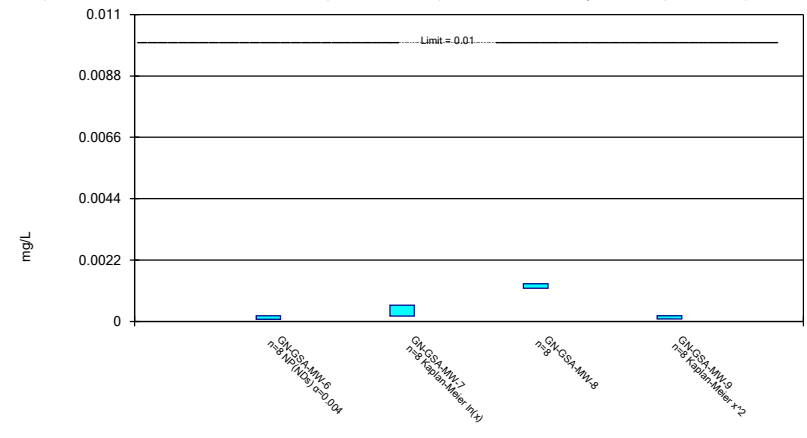
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Constituent: Arsenic Analysis Run 10/3/2022 4:16 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

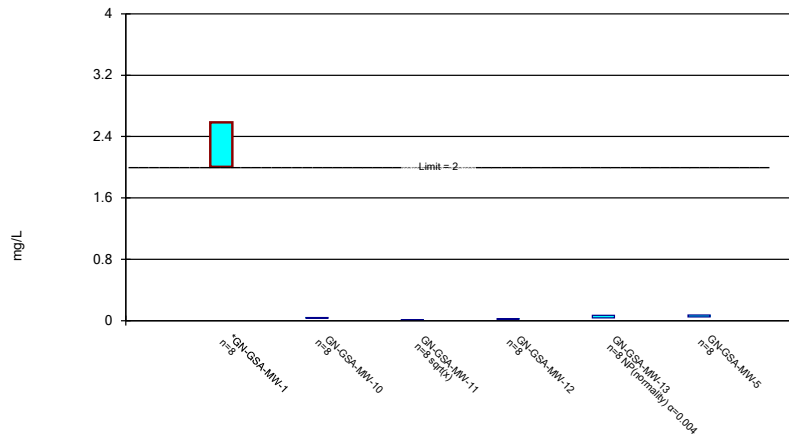
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Constituent: Arsenic Analysis Run 10/3/2022 4:16 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

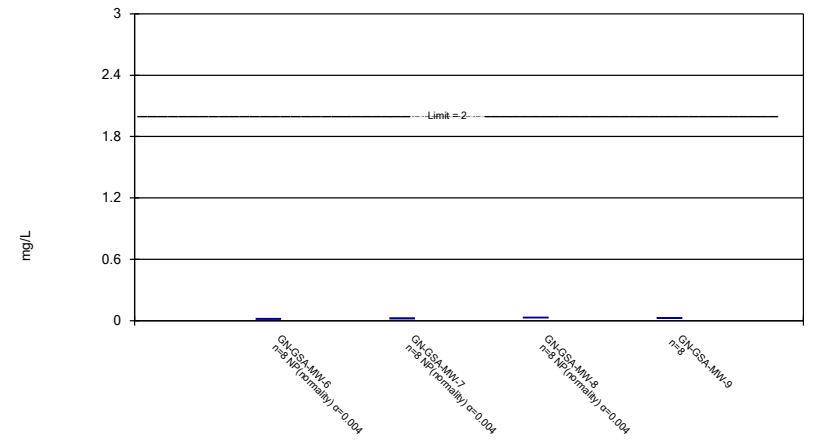
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 10/3/2022 4:16 PM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

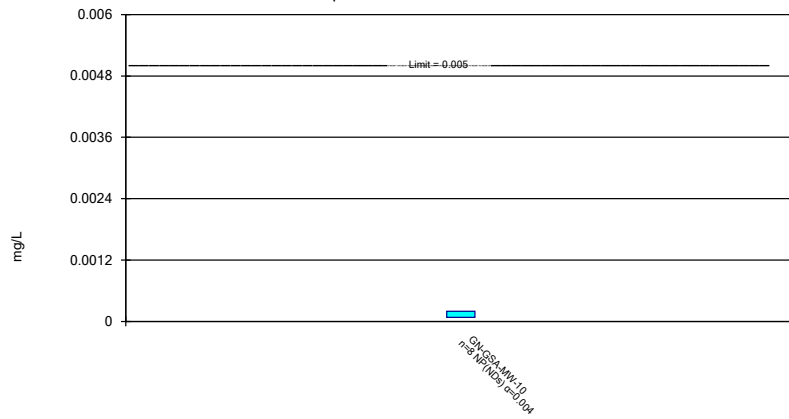
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 10/3/2022 4:16 PM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

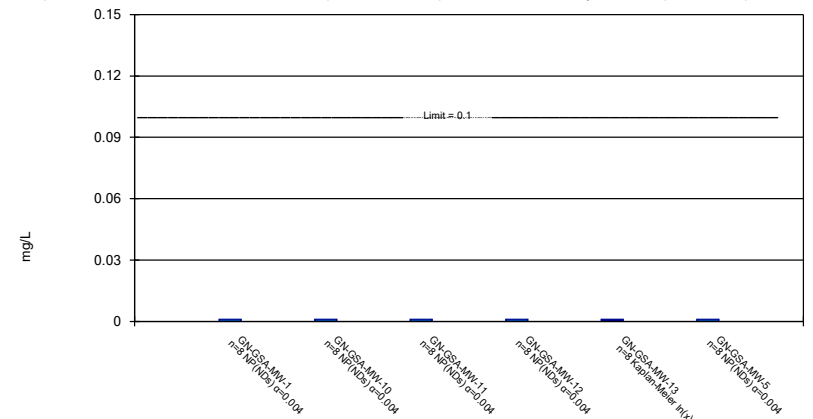
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 10/3/2022 4:16 PM View: Appendix 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 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

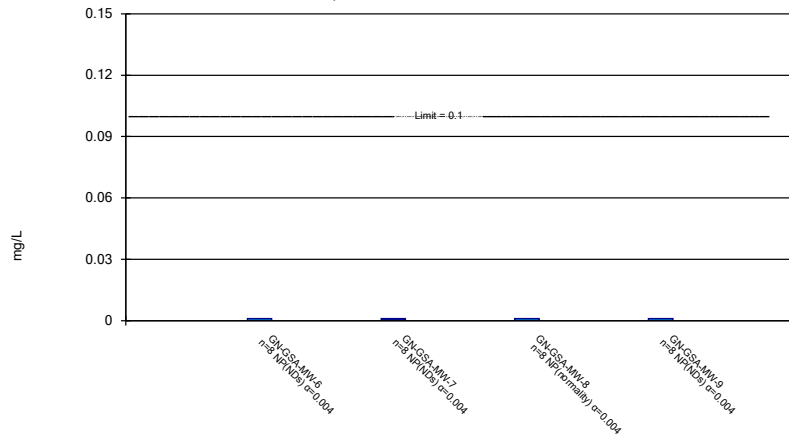


Constituent: Chromium Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA



### Non-Parametric Confidence Interval

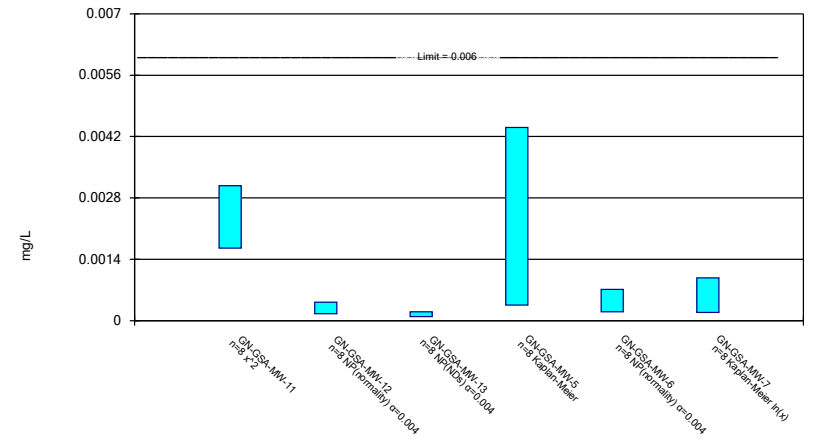
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

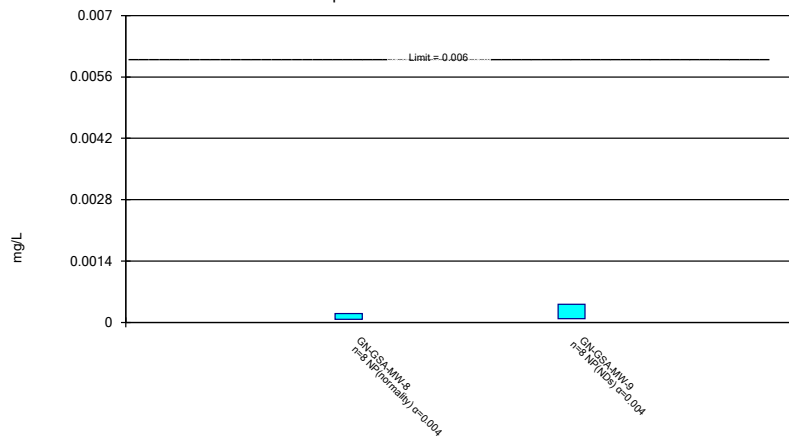
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Constituent: Cobalt Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

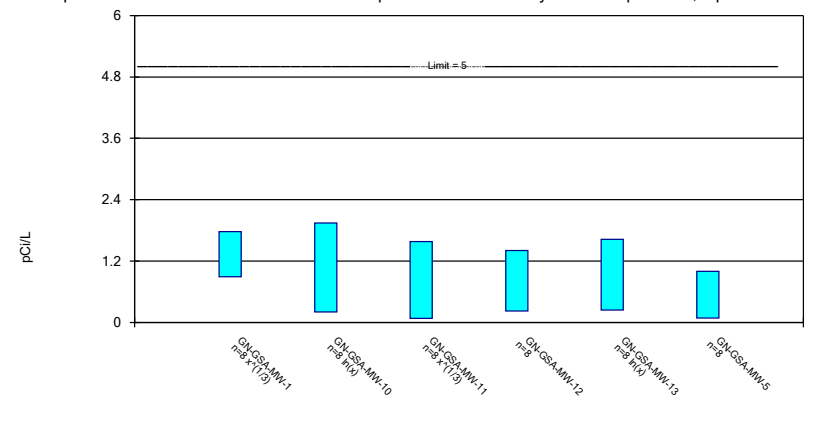
Compliance Limit is not exceeded.



Constituent: Cobalt Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric Confidence Interval

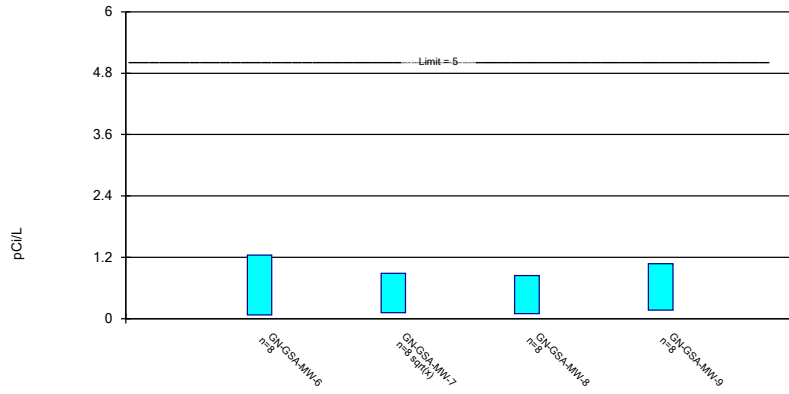
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Constituent: Combined Radium 226 + 228 Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
 Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric Confidence Interval

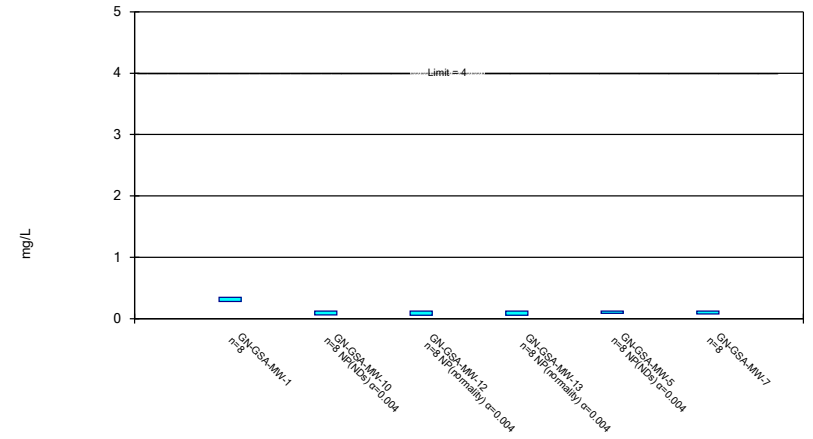
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Constituent: Combined Radium 226 + 228 Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

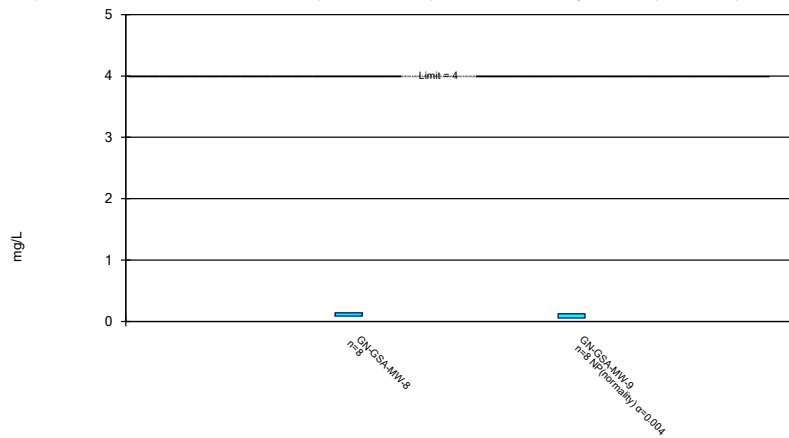
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

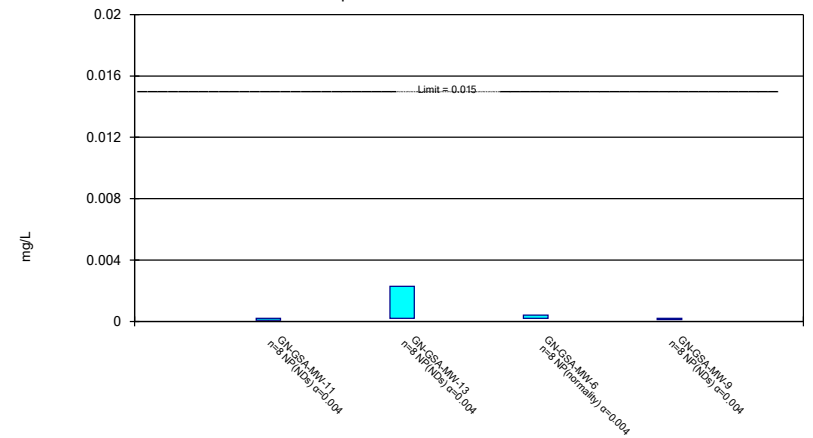
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

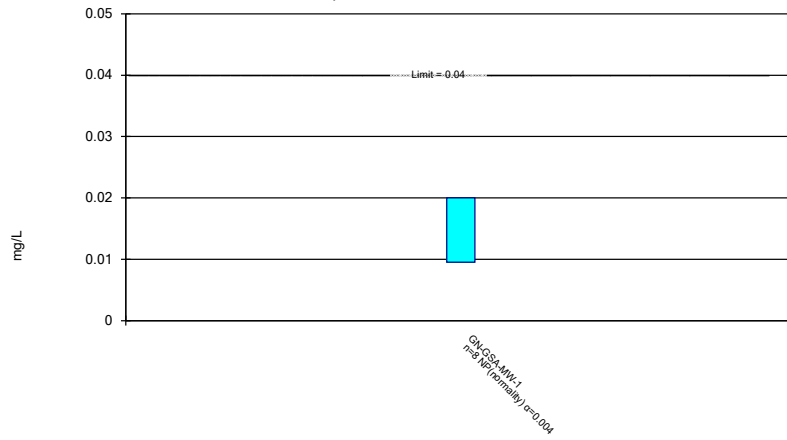
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

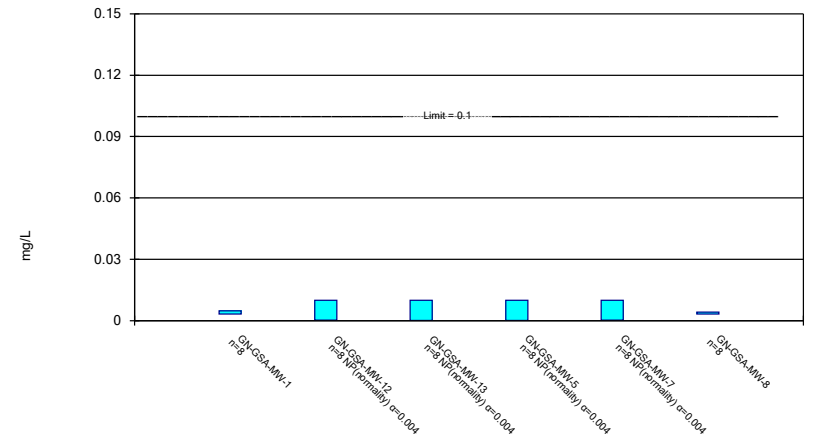
Compliance Limit is not exceeded.



Constituent: Lithium Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Parametric and Non-Parametric (NP) Confidence Interval

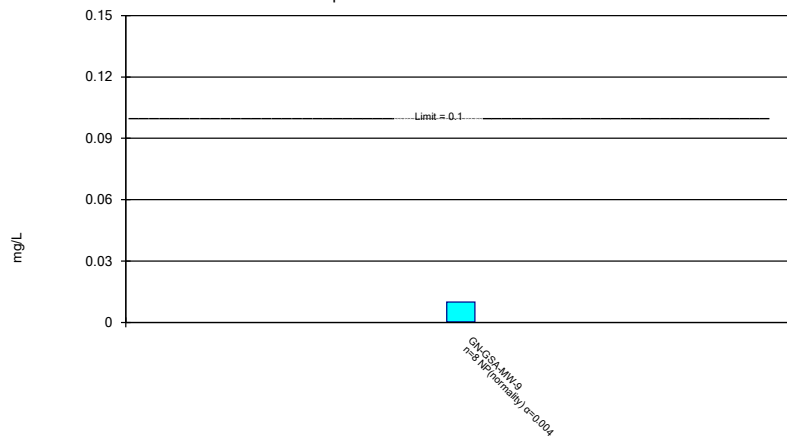
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 10/3/2022 4:17 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5	GN-GSA-MW-6
5/20/2019					0.00241 (J)	0.00171 (J)
5/21/2019	0.000909 (J)	0.000916 (J)	0.000813 (J)	0.00127 (J)		
9/3/2019		<0.001015				
9/4/2019	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
2/11/2020					<0.001015	<0.001015
2/12/2020	<0.001015	<0.001015	<0.001015	<0.001015		
9/8/2020		<0.001015			<0.001015	<0.001015
9/9/2020	<0.001015		<0.001015	<0.001015		
4/13/2021	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
10/4/2021	<0.001015			<0.001015	<0.001015	<0.001015
10/5/2021		<0.001015	<0.001015			
4/12/2022					<0.001015	<0.001015
4/13/2022	<0.001015	<0.001015	<0.001015	<0.001015		
8/16/2022				<0.001015	<0.001015	<0.001015
8/17/2022		<0.001015				
8/18/2022	<0.001015		<0.001015			
Mean	0.001002	0.001003	0.0009898	0.001047	0.001189	0.001102
Std. Dev.	3.748E-05	3.5E-05	7.142E-05	9.016E-05	0.0004932	0.0002457
Upper Lim.	0.001015	0.001015	0.001015	0.00127	0.00241	0.00171
Lower Lim.	0.000909	0.000916	0.000813	0.001015	0.001015	0.001015

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
5/20/2019	0.00123 (J)		
5/21/2019		0.00106 (J)	0.00112 (J)
9/3/2019		<0.001015	<0.001015
9/4/2019	<0.001015		
2/11/2020	<0.001015		
2/12/2020		<0.001015	<0.001015
9/8/2020			<0.001015
9/9/2020	<0.001015	<0.001015	
4/13/2021	<0.001015	<0.001015	<0.001015
10/4/2021	<0.001015	<0.001015	
10/5/2021			<0.001015
4/12/2022	<0.001015	<0.001015	<0.001015
8/16/2022	<0.001015	<0.001015	
8/17/2022			<0.001015
Mean	0.001042	0.001021	0.001028
Std. Dev.	7.601E-05	1.591E-05	3.712E-05
Upper Lim.	0.00123	0.00106	0.00112
Lower Lim.	0.001015	0.001015	0.001015

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5
5/20/2019						0.00259 (J)
5/21/2019	0.00722	<0.000203	<0.000203	<0.000203	0.00348 (J)	
9/3/2019		<0.000203	<0.000203			
9/4/2019	0.00534			<0.000203	<0.000203	0.00305 (J)
2/11/2020						<0.000203
2/12/2020	0.0062	<0.000203	<0.000203	<0.000203	<0.000203	
9/8/2020		<0.000203				<0.000203
9/9/2020	0.0046 (J)		<0.000203	<0.000203	<0.000203	
4/13/2021	0.00427	8.71E-05 (J)	9.35E-05 (J)	0.00033	0.000189 (J)	0.000587
10/4/2021	0.00335				0.00012 (J)	0.00057
10/5/2021		7E-05 (J)	0.00011 (J)	0.00023		
4/12/2022						0.0009
4/13/2022	0.00248	<0.000203	9E-05 (J)	0.00021	0.00014 (J)	
8/16/2022					0.000131 (J)	0.00134
8/17/2022		<0.000203	0.000109 (J)			
8/18/2022	0.00199			0.000189 (J)		
Mean	0.004431	0.0001719	0.0001518	0.0002214	0.0005836	0.00118
Std. Dev.	0.001802	5.779E-05	5.514E-05	4.536E-05	0.001171	0.001084
Upper Lim.	0.006341	0.000203	0.000203	0.00033	0.00348	0.002162
Lower Lim.	0.002522	7E-05	9E-05	0.000189	0.00012	0.0002509

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
5/20/2019	<0.000203	<0.000203		
5/21/2019			0.00128 (J)	<0.000203
9/3/2019			0.00118 (J)	<0.000203
9/4/2019	<0.000203	<0.000203		
2/11/2020	<0.000203	0.001 (J)		
2/12/2020			0.00133 (J)	<0.000203
9/8/2020	<0.000203			<0.000203
9/9/2020		<0.000203	0.00126 (J)	
4/13/2021	9.88E-05 (J)	0.000469	0.00134	0.000237
10/4/2021	8E-05 (J)	0.00029	0.00135	
10/5/2021				0.00014 (J)
4/12/2022	0.00011 (J)	0.00043	0.00124	0.00018 (J)
8/16/2022	<0.000203	0.000335	0.00116	
8/17/2022				8.6E-05 (J)
Mean	0.000163	0.0003916	0.001268	0.0001819
Std. Dev.	5.583E-05	0.0002667	7.186E-05	4.747E-05
Upper Lim.	0.000203	0.0005823	0.001344	0.0002016
Lower Lim.	8E-05	0.0001943	0.001191	8.981E-05

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5
5/20/2019						0.0671
5/21/2019	2.51	0.0323	0.0056 (J)	0.0214	0.0697	
9/3/2019		0.0377	0.00656 (J)			
9/4/2019	1.96			0.0205	0.0455	0.0824
2/11/2020						0.0513
2/12/2020	2.15	0.0344	0.00444 (J)	0.024	0.0419	
9/8/2020		0.0331				0.0464
9/9/2020	2.5		0.00545 (J)	0.0182	0.039	
4/13/2021	2.41	0.0373	0.00636	0.0234	0.0403	0.0478
10/4/2021	1.92				0.0369	0.0494
10/5/2021		0.0359	0.00871	0.0212		
4/12/2022						0.0666
4/13/2022	2.68	0.0403	0.0162	0.0272	0.0415	
8/16/2022					0.0383	0.0743
8/17/2022		0.0361	0.0131			
8/18/2022	2.23			0.0204		
Mean	2.295	0.03589	0.008303	0.02204	0.04414	0.06066
Std. Dev.	0.2746	0.002609	0.004187	0.002758	0.01066	0.01372
Upper Lim.	2.586	0.03865	0.01245	0.02496	0.0697	0.07521
Lower Lim.	2.004	0.03312	0.00438	0.01911	0.0369	0.04612



# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
5/20/2019	0.0156	0.0163		
5/21/2019			0.0264	0.0249
9/3/2019			0.0314	0.0271
9/4/2019	0.0176	0.0256		
2/11/2020	0.0175	0.0194		
2/12/2020			0.0257	0.0214
9/8/2020	0.0159			0.0234
9/9/2020		0.0161	0.026	
4/13/2021	0.0175	0.016	0.0262	0.0226
10/4/2021	0.0161	0.0181	0.0265	
10/5/2021				0.0234
4/12/2022	0.0214	0.0192	0.0294	0.0252
8/16/2022	0.0178	0.0175	0.0275	
8/17/2022				0.0237
Mean	0.01743	0.01853	0.02739	0.02396
Std. Dev.	0.001828	0.003156	0.002004	0.001748
Upper Lim.	0.0214	0.0256	0.0314	0.02581
Lower Lim.	0.0156	0.016	0.0257	0.02211

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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GN-GSA-MW-10

5/21/2019	<0.0002
9/3/2019	<0.0002
2/12/2020	<0.0002
9/8/2020	<0.0002
4/13/2021	<0.0002
10/5/2021	8E-05 (J)
4/13/2022	<0.0002
8/17/2022	0.000143 (J)
Mean	0.0001779
Std. Dev.	4.429E-05
Upper Lim.	0.0002
Lower Lim.	8E-05

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5
5/20/2019						<0.001015
5/21/2019	<0.001015	<0.001015	<0.001015	<0.001015	0.002 (J)	
9/3/2019		<0.001015	<0.001015			
9/4/2019	<0.001015			<0.001015	<0.001015	<0.001015
2/11/2020						<0.001015
2/12/2020	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	
9/8/2020		<0.001015				<0.001015
9/9/2020	<0.001015		<0.001015	<0.001015	<0.001015	
4/13/2021	<0.001015	<0.001015	<0.001015	<0.001015	0.000518 (J)	<0.001015
10/4/2021	0.00021 (J)				0.00055 (J)	0.00028 (J)
10/5/2021		0.00023 (J)	0.0003 (J)	0.00029 (J)		
4/12/2022						0.00029 (J)
4/13/2022	<0.001015	<0.001015	<0.001015	0.00021 (J)	0.00052 (J)	
8/16/2022					0.000444 (J)	0.000271 (J)
8/17/2022		0.000266 (J)	<0.001015			
8/18/2022	<0.001015			<0.001015		
Mean	0.0009144	0.0008233	0.0009256	0.0008238	0.0008846	0.0007395
Std. Dev.	0.0002846	0.0003552	0.0002528	0.0003548	0.0005167	0.0003803
Upper Lim.	0.001015	0.001015	0.001015	0.001015	0.0009794	0.001015
Lower Lim.	0.00021	0.00023	0.0003	0.00021	0.0003691	0.000271

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
5/20/2019	<0.001015	<0.001015		
5/21/2019			<0.001015	<0.001015
9/3/2019			<0.001015	<0.001015
9/4/2019	<0.001015	<0.001015		
2/11/2020	<0.001015	<0.001015		
2/12/2020			<0.001015	<0.001015
9/8/2020	<0.001015			<0.001015
9/9/2020		<0.001015	<0.001015	
4/13/2021	0.000257 (J)	0.000361 (J)	0.000291 (J)	0.000276 (J)
10/4/2021	0.00025 (J)	0.00056 (J)	0.00037 (J)	
10/5/2021				0.00021 (J)
4/12/2022	0.00022 (J)	<0.001015	0.00035 (J)	<0.001015
8/16/2022	<0.001015	0.0004 (J)	0.000437 (J)	
8/17/2022				<0.001015
Mean	0.0007253	0.0007995	0.0006885	0.000822
Std. Dev.	0.0004	0.0003027	0.0003513	0.0003578
Upper Lim.	0.001015	0.001015	0.001015	0.001015
Lower Lim.	0.00022	0.000361	0.000291	0.00021

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5	GN-GSA-MW-6	GN-GSA-MW-7
10/23/2018			<0.0002			
5/20/2019				0.00489 (J)	<0.0002	<0.0002
5/21/2019	0.00245 (J)	<0.0002	0.0578 (o)			
9/3/2019	0.00298 (J)					
9/4/2019		<0.0002	<0.0002	0.00527	<0.0002	0.00217 (J)
2/11/2020				<0.0002	<0.0002	<0.0002
2/12/2020	<0.0002	<0.0002	<0.0002			
9/8/2020				<0.0002	<0.0002	
9/9/2020	0.00256 (J)	<0.0002	<0.0002			<0.0002
4/13/2021	0.00212	0.000218	0.000158 (J)	0.00104	0.000682	0.00077
10/4/2021			0.0001 (J)	0.00142	0.00065	0.00033
10/5/2021	0.00217	0.00042				
4/12/2022				0.00215	0.00066	0.0006
4/13/2022	0.00324	0.00016 (J)	<0.0002			
8/16/2022			8.8E-05 (J)	0.00389	0.000713	0.000415
8/17/2022	0.00278					
8/18/2022		0.000296				
Mean	0.002312	0.0002367	0.0001682	0.002382	0.0004381	0.0006106
Std. Dev.	0.0009354	8.344E-05	4.817E-05	0.002043	0.0002552	0.0006633
Upper Lim.	0.003081	0.00042	0.0002	0.004408	0.000713	0.000978
Lower Lim.	0.001653	0.00016	8.8E-05	0.0003572	0.0002	0.0001861

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-8	GN-GSA-MW-9
5/21/2019	<0.0002	<0.0002
9/3/2019	<0.0002	<0.0002
2/12/2020	<0.0002	<0.0002
9/8/2020		<0.0002
9/9/2020	<0.0002	
4/13/2021	0.000123 (J)	8.16E-05 (J)
10/4/2021	0.00014 (J)	
10/5/2021		0.00041
4/12/2022	7E-05 (J)	<0.0002
8/16/2022	0.000133 (J)	
8/17/2022		0.000132 (J)
Mean	0.0001582	0.0002029
Std. Dev.	4.924E-05	9.462E-05
Upper Lim.	0.0002	0.00041
Lower Lim.	7E-05	8.16E-05

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L)    Analysis Run 10/3/2022 4:19 PM    View: Appendix IV

Plant Gaston    Client: Southern Company    Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5
5/20/2019						-0.251 (U)
5/21/2019	1.38	5.12 (U)	0.0995 (U)	0.376 (U)	0.503 (U)	
9/3/2019		0.793	3.47			
9/4/2019	2.39			0.534	3.92	1.05
2/11/2020						0.585
2/12/2020	1.17	0.13 (U)	0.0433 (U)	0.836	0.799	
9/8/2020		0.65 (U)				0.921
9/9/2020	1.02		0.798	1.88	0.27 (U)	
4/13/2021	0.909 (U)	0.531 (U)	0.589 (U)	0.592 (U)	0.667 (U)	0.434 (U)
10/4/2021	1.43				0.231 (U)	0.11 (U)
10/5/2021		0.269 (U)	0.524 (U)	1.42		
4/12/2022						0.739 (U)
4/13/2022	1.31	0.551 (U)	0.453 (U)	0.257 (U)	0.357 (U)	
8/16/2022					0.98	0.734 (U)
8/17/2022		0.934 (U)	0.33 (U)			
8/18/2022	0.975			0.607 (U)		
Mean	1.323	1.122	0.7884	0.8128	0.9659	0.5403
Std. Dev.	0.4722	1.636	1.112	0.5576	1.222	0.432
Upper Lim.	1.773	1.941	1.583	1.404	1.623	0.9981
Lower Lim.	0.8922	0.2053	0.0765	0.2217	0.2398	0.08236

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-8	GN-GSA-MW-9
5/20/2019	0.498	0.465		
5/21/2019			0.21 (U)	0.289 (U)
9/3/2019			0.983	0.994
9/4/2019	0.608	1.28		
2/11/2020	0.743	0.513 (U)		
2/12/2020			-0.0587 (U)	0.377 (U)
9/8/2020	-0.109 (U)			1.07
9/9/2020		0.382 (U)	0.287 (U)	
4/13/2021	0.611 (U)	0.492 (U)	0.391 (U)	0.592 (U)
10/4/2021	1.7	0.144 (U)	0.794 (U)	
10/5/2021				0.2 (U)
4/12/2022	0.157 (U)	0.0248 (U)	0.367 (U)	0.191 (U)
8/16/2022	1.06 (U)	0.537 (U)	0.78 (U)	
8/17/2022				1.25
Mean	0.6585	0.4797	0.4692	0.6204
Std. Dev.	0.5509	0.3731	0.3509	0.4258
Upper Lim.	1.242	0.8842	0.841	1.072
Lower Lim.	0.07461	0.1152	0.09728	0.1691



# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-10	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5	GN-GSA-MW-7
5/20/2019					0.0842 (J)	0.0919 (J)
5/21/2019	0.264	<0.125	0.0649 (J)	0.0595 (J)		
9/3/2019		<0.125				
9/4/2019	0.33		0.0547 (J)	0.0555 (J)	0.0962 (J)	0.07 (J)
2/11/2020					<0.125	0.0912 (J)
2/12/2020	0.301	<0.125	0.0586 (J)	<0.125		
9/8/2020		0.0617 (J)			<0.125	
9/9/2020	0.313		0.068 (J)	0.0655 (J)		0.118
4/13/2021	0.29	<0.125	<0.125	0.0633 (J)	<0.125	0.129
10/4/2021	0.376			0.0748 (J)	<0.125	0.12
10/5/2021		<0.125	<0.125			
4/12/2022					<0.125	0.0724 (J)
4/13/2022	0.307	<0.125	<0.125	<0.125		
8/16/2022				0.0614 (J)	<0.125	0.112 (J)
8/17/2022		<0.125				
8/18/2022	0.327		<0.125			
Mean	0.3135	0.1171	0.09328	0.07875	0.1163	0.1006
Std. Dev.	0.03287	0.02238	0.03414	0.02908	0.01643	0.0224
Upper Lim.	0.3483	0.125	0.125	0.125	0.125	0.1243
Lower Lim.	0.2787	0.0617	0.0547	0.0555	0.0842	0.07682

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-8	GN-GSA-MW-9
5/21/2019	0.109	0.0526 (J)
9/3/2019	0.123	0.0554 (J)
2/12/2020	0.108	<0.125
9/8/2020		0.097 (J)
9/9/2020	0.14	
4/13/2021	0.119	0.0602 (J)
10/4/2021	0.134	
10/5/2021		<0.125
4/12/2022	0.0621 (J)	<0.125
8/16/2022	0.0979 (J)	
8/17/2022		<0.125
Mean	0.1116	0.09565
Std. Dev.	0.02435	0.03418
Upper Lim.	0.1374	0.125
Lower Lim.	0.08581	0.0526

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-11	GN-GSA-MW-13	GN-GSA-MW-6	GN-GSA-MW-9
5/20/2019			<0.000203	
5/21/2019	<0.000203	0.00228 (J)		<0.000203
9/3/2019	<0.000203			<0.000203
9/4/2019		<0.000203	<0.000203	
2/11/2020			<0.000203	
2/12/2020	<0.000203	<0.000203		<0.000203
9/8/2020			<0.000203	<0.000203
9/9/2020	<0.000203	<0.000203		
4/13/2021	<0.000203	<0.000203	0.000305	<0.000203
10/4/2021		<0.000203	0.00031	
10/5/2021	<0.000203			<0.000203
4/12/2022			0.0004	0.00011 (J)
4/13/2022	0.00011 (J)	<0.000203		
8/16/2022		<0.000203	0.000318	
8/17/2022	7.8E-05 (J)			<0.000203
Mean	0.0001758	0.0004626	0.0002681	0.0001914
Std. Dev.	5.118E-05	0.0007343	7.555E-05	3.288E-05
Upper Lim.	0.000203	0.00228	0.0004	0.000203
Lower Lim.	7.8E-05	0.000203	0.000203	0.00011

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

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	GN-GSA-MW-1
5/21/2019	<0.02
9/4/2019	<0.02
2/12/2020	<0.02
9/9/2020	0.0101 (J)
4/13/2021	0.00953 (J)
10/4/2021	0.00963 (J)
4/13/2022	0.00966 (J)
8/18/2022	0.00965 (J)
Mean	0.01357
Std. Dev.	0.005326
Upper Lim.	0.02
Lower Lim.	0.00953

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-12	GN-GSA-MW-13	GN-GSA-MW-5	GN-GSA-MW-7	GN-GSA-MW-8
5/20/2019				<0.01	<0.01	
5/21/2019	0.00504 (J)	<0.01	<0.01			0.00379 (J)
9/3/2019						0.00437 (J)
9/4/2019	0.00504 (J)	<0.01	<0.01	<0.01	<0.01	
2/11/2020				<0.01	<0.01	
2/12/2020	0.00448 (J)	<0.01	<0.01			0.00322 (J)
9/8/2020				<0.01		
9/9/2020	0.00405 (J)	<0.01	<0.01		<0.01	0.00418 (J)
4/13/2021	0.00353	0.000298	0.000175 (J)	9.4E-05 (J)	0.000276	0.00318
10/4/2021	0.00372		0.00016 (J)	9E-05 (J)	0.00025	0.00345
10/5/2021		0.00033				
4/12/2022				0.00012 (J)	0.00027	0.00347
4/13/2022	0.0033	0.00031	0.00021			
8/16/2022			0.000189 (J)	0.000131 (J)	0.000232	0.00356
8/18/2022	0.00295	0.000207				
Mean	0.004014	0.005143	0.005092	0.005054	0.005128	0.003653
Std. Dev.	0.0007825	0.005192	0.005247	0.005287	0.005208	0.0004318
Upper Lim.	0.004843	0.01	0.01	0.01	0.01	0.00411
Lower Lim.	0.003184	0.000207	0.00016	9E-05	0.000232	0.003195

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/3/2022 4:19 PM View: Appendix IV  
Plant Gaston Client: Southern Company Data: Gaston GSA

---

GN-GSA-MW-9

5/21/2019	<0.01
9/3/2019	<0.01
2/12/2020	<0.01
9/8/2020	<0.01
4/13/2021	0.000207
10/5/2021	0.00032
4/12/2022	0.00021
8/17/2022	0.000338
Mean	0.005134
Std. Dev.	0.005202
Upper Lim.	0.01
Lower Lim.	0.000207

# Appendix F



# ALTERNATE SOURCE DEMONSTRATION

## PLANT GASTON GYPSUM POND

*Prepared for*

**Alabama Power Company**

600 North 18<sup>th</sup> Street

Birmingham, AL 35203

*Prepared by*

Southern Company Services

June 2022



**Southern  
Company**



## CERTIFICATION STATEMENT

This Alternate Source Demonstration for the Alabama Power Company, Plant Gaston, Gypsum Pond, has been prepared in compliance with applicable United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D; published in 80 FR 21302-21501, April 17, 2015) and ADEM Admin Code r. 335-13-15-.06(6)(g)4.(ii) under the direction of an Alabama licensed professional engineer.



Gregory Whetstone, P.E.

AL Registered Professional Engineer No. 27885



06/06/2022

Date



Austin C. Patton, P.G.

AL Registered Professional Geologist No. 1585



06/06/2022

Date

## TABLE OF CONTENTS

1.0 INTRODUCTION .....	1
1.1 Site Description and Geology .....	2
1.2 Groundwater Monitoring.....	3
1.3 Basis of the SSL .....	3
2.0 ALTERNATE SOURCE DEMONSTRATION.....	3
2.1 Temporal Trends in Barium .....	3
2.2 Gypsum Chemistry and Groundwater Geochemistry .....	4
2.2.1 <i>FGD Indicator Parameters</i> .....	5
2.2.2 <i>Major Cations and Anions – Piper Diagram</i> .....	6
2.3 Natural Sources .....	7
2.3.1 <i>Natural Occurrences of Barium at the Site</i> .....	8
2.4 GN-GSA-MW-1 Well Construction .....	11
3.0 CONCLUSIONS.....	11
4.0 REFERENCES .....	13

## **TABLES**

Table 1	Barium Concentrations in well GN-GSA-MW-1
Table 2	GN-GSA-MW-1 FGD Gypsum Indicator Constituent Comparison

## **FIGURES**

Figure 1	Site Location Map
Figure 2	Site Plan Map
Figure 3	Site Geologic Map
Figure 4	Monitoring Well Location Map
Figure 5	GN-GSA-MW-1 Barium Concentrations vs. Other Compliance Wells
Figure 6	GN-GSA-MW-1 Barium Concentrations vs. Groundwater Elevation
Figure 7	Sulfate Concentrations at GN-GSA-MW-1 vs. Upgradient Wells
Figure 8	Calcium Concentrations at GN-GSA-MW-1 vs. Upgradient Wells
Figure 9	Piper Trilinear Diagram (10/04/2022)
Figure 10	Geologic and Hydrogeochemical Cross-Section A – A’

## **APPENDICES**

Appendix A	Core Sample Analytical Results (02/16/2022)
Appendix B	Well Construction and Boring Logs
Appendix C	Piezometer GS2-4 Groundwater Analytical Results (04/12/2022)

## LIST OF ACRONYMS

ADEM	Alabama Department of Environmental Management
APCEL	Alabama Power Environmental Laboratory
ASD	Alternate Source Demonstration
CCR	Coal Combustion Residual
cm/sec	centimeter per second
EPA	United States Environmental Protection Agency
ERI	electrical resistivity imaging
FGD	flue gas desulfurization
GWPS	groundwater protection standard
HDPE	high-density polyethylene
MCL	maximum contaminant level
mg/L	milligrams per liter
SEM	scanning electron microscopy
SSI	statistically significant increase
SSL	statistically significant levels
s.u.	standard units
TDS	total dissolved solids
UPL	upper prediction limit

## 1.0 INTRODUCTION

This document presents an alternate source demonstration (ASD) for statistically significant levels (SSLs) of barium over the groundwater protection standard (GWPS) of 2.0 mg/L in groundwater samples collected from well GN-GSA-MW-1 at Alabama Power Company's Plant Gaston Gypsum Pond (Gypsum Pond). This ASD has been prepared pursuant to 40 CFR §257.95(g)(3)(ii) and Alabama Department of Environmental Management (ADEM Admin. Code) r. 335-13-15-.06(6)(g)4.(ii), which state that the owner or operator may demonstrate that a source other than the CCR unit caused the statistically significant increase, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

Southern Company Services (SCS) implemented groundwater monitoring activities at the Plant Gaston Gypsum Pond during March 2016 to comply with the requirements of the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR 257 Subpart D). Statistical analyses conducted on data from the second assessment monitoring event (June 2018) identified an SSL of barium in well GN-GSA-MW-1 above the GWPS.

Based on evaluation of site data, the SSL for barium observed in monitoring well GN-GSA-MW-1 is likely the result of the natural occurrence of barium in groundwater at the site. This conclusion is supported by the following lines of evidence presented in this report:

- Barium is not typically a constituent associated with a CCR release and the SSL for barium is limited to a single downgradient monitoring well location.
- CCR indicator parameters such as boron, sulfate, chloride, and calcium in well GN-GSA-MW-1 are not elevated above background concentrations.
- Elevated barium concentrations are not observed in nearby monitoring wells that are screened more shallow and more likely to be impacted by a release from the Gypsum Pond.
- Barium concentrations at GN-GSA-MW-1 have remained relatively stable over time with no evidence of variability that may be indicative of a leachate release.
- A review of published geologic literature indicates that naturally occurring barium-containing minerals are present in the rock and soils in the Gypsum Pond vicinity.

To summarize the ASD, the SSL for barium from monitoring well GN-GSA-MW-1 is representative of variability in naturally occurring barium in groundwater and is not the result of a release from the Gypsum Pond.

## 1.1 Site Description and Geology

Ernest C. Gaston Electric Generating Plant (Plant Gaston) is located along the Coosa River, adjacent to and partially within the Town of Wilsonville in Shelby County, Alabama. It lies approximately 25 miles southeast of Birmingham with a physical address of 31972 Alabama Highway 25, Wilsonville, AL 35186. The Gypsum Pond is located immediately to the north of the plant proper. **Figure 1, Site Location Map**, depicts the location of the Plant and Gypsum Pond with respect to the surrounding area. **Figure 2, Site Plan Map**, depicts the general configuration of the CCR unit and the site monitoring well network.

The Plant Gaston Gypsum Pond was constructed with a liner consisting of a 60-mil HDPE geomembrane overlying a 2-foot-thick layer of compacted clay having a minimum hydraulic conductivity of  $1 \times 10^{-7}$  cm/sec. The constructed liner meets the requirements for a composite liner as outlined in 40 CFR §257.70(b) and ADEM Admin. Code r. 335-13-15-.04(1)(b). This low permeability system restricts the vertical migration of ponded water from entering the uppermost aquifer system.

The site and surrounding area have undergone extensive structural deformation as seen in the Site geologic map. **Figure 3, Site Geologic Map**, depicts the surficial geologic units that underlie the Site and surrounding area. The site is located within the southern Appalachian thrust belt, which consists regionally of Paleozoic sedimentary rocks that were deformed during the late Paleozoic Alleghenian orogeny by northeast-striking, northwest-translated thrust faults and thrust related folds. The majority bedrock geology in this quadrangle is dominated by one regional thrust fault, the Pell City fault and thrust sheet. In the southwestern portion of the map, the footwall of the Pell City fault trails part of the Yellowleaf and Wilsonville thrust sheet. Located just west and northwest of the site, the Fourmile Creek and Steam Plant anticlines exhibit tight folds and small-scale faults where Mississippian Fort Payne chert unconformably overlies the Upper Knox (Thomas and Drahovzal, 2012).

The foundation soils beneath the impoundment are comprised of residuum of dolomite, limestone, and shale, typically classified as highly plastic clays and silty clays with occasional chert layers. The bedrock at the site consists of Cambrian and Ordovician aged carbonate rocks of the Knox Group (Newala and Longview limestones) that locally, have been folded and faulted along with the Ft. Payne chert and Parkwood shale. Boring investigations at the Gypsum Pond show cherty residual clay and karst features in the carbonate bedrock. 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 170 feet and was described as a medium to dark gray, micritic, dolomitic limestone with thin shale interbedded shale layers.

## 1.2 Groundwater Monitoring

Groundwater monitoring at the Gypsum Pond is performed in accordance with § 257.94(b) and ADEM Admin. Code r. 335-13-15-.06(5)(b). Based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, Alabama Power initiated an assessment monitoring program on January 15, 2018. The site status is currently in assessment monitoring.

The groundwater monitoring network is comprised of 15 total monitoring wells (four upgradient, ten downgradient, and one water-level-only piezometer). **Figure 4, Monitoring Well Location Map**, depicts the certified monitoring well network. Site compliance wells are sampled semi-annually between: (1) late winter –mid spring and (2) early to late fall. During routine semi-annual monitoring events, all compliance wells are sampled and analyzed for Appendix III and Appendix IV constituents. Additional general chemistry constituents (major ions and anions) are now being collected routinely as well.

## 1.3 Basis of the SSL

Data collected from downgradient monitoring wells at the Plant Gaston Gypsum Pond were compared to GWPS. Barium was detected at GN-GSA-MW-1 below the GWPS during background sampling and detection monitoring events (March 2016 to February 2018) at concentrations ranging from 1.43 mg/L to 1.80 mg/L, respectively. Since the June 2018 sampling event, barium concentrations have been slightly elevated compared to the March 2016 to February 2018 period.

The results of statistical analysis reported the first occurrence of an SSL in GN-GSA-MW-1 for barium in the 2021 Annual Groundwater Monitoring Report and followed the Fall 2021 sampling event. No other SSLs exceeding the GWPS were observed during this event.

## 2.0 ALTERNATE SOURCE DEMONSTRATION

Data collected from the site since 2016 indicates that barium naturally occurs in groundwater and the SSL for barium reflects natural variations in groundwater chemistry and subsurface heterogeneity at the Gypsum Pond. Lines of evidence supporting this demonstration are described in detail in this section.

### 2.1 Temporal Trends in Barium

Barium concentrations in well GN-GSA-MW-1 have remained elevated relative to all other on-site wells since the initial background and detection sampling in March of 2016. During this time, there have been no other SSLs for barium in site wells and no statistically significant upward trends in adjacent downgradient compliance wells. These data suggest a localized source of barium connected to the well screen of GN-GSA-MW-1.

**Figure 5, GN-GSA-MW-1 Barium Concentrations vs. Other Compliance Wells** depicts the low or non-detectable concentrations of barium reported from the four upgradient monitoring wells (GN-GSA-MW-3, GN-GSA-MW-14S, GN-GSA-MW-2, and GN-GSA-MW-15) in relation to GN-GSA-MW-1.

With exception of GN-GSA-MW-1, concentrations in remaining site wells from March 2016 to the most recent sampling event in October 2021 ranged from non-detectable to 0.08 mg/L. Concentrations of barium during this time interval for GN-GSA-MW-1 ranged from 1.43 mg/L to 2.51 mg/L. **Table 1, Barium Concentrations from GN-GSA-MW-1**, provides a summary of the reported detections from March 2016 to February 2022 emanating from samples collected during monitoring events.

**Figure 6, GN-GSA-MW-1 Barium Concentrations vs. Groundwater Elevation**, depicts a minor correlation between the detected concentrations and the temporal fluctuations in measured groundwater levels. An assessment of the data reveals similar responses in barium concentrations dependent on corresponding changes in water level (e.g., an increase in water levels elicited an increase in barium).

## 2.2 Gypsum Chemistry and Groundwater Geochemistry

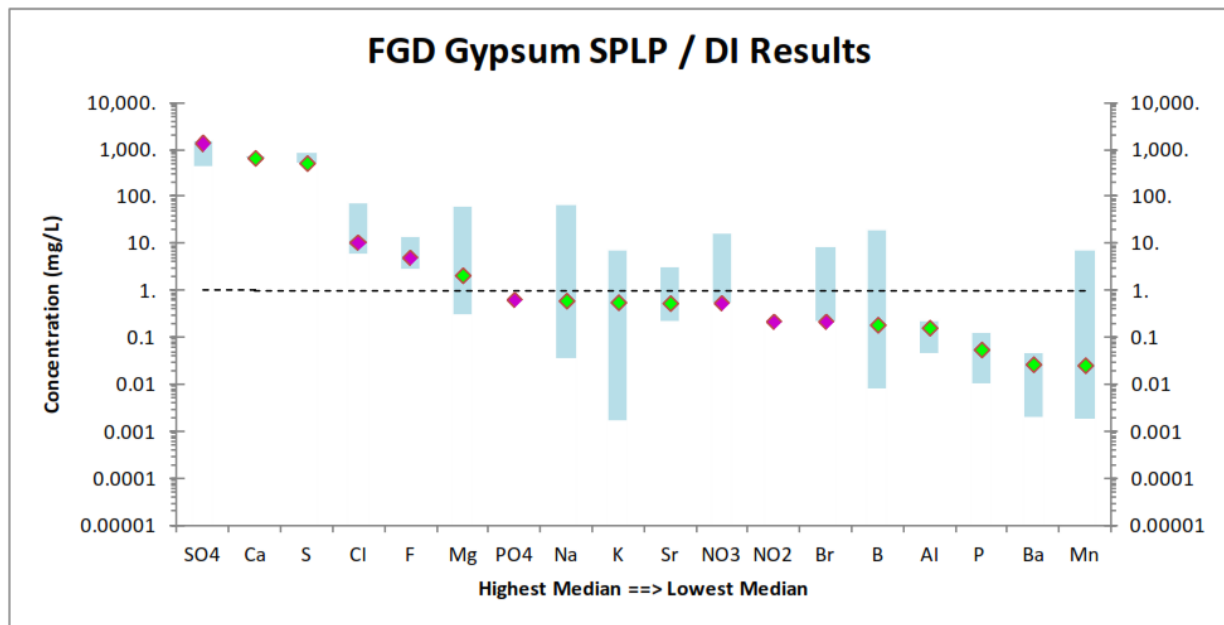
FGD (flue gas desulfurization) gypsum typically consists of 95 to 99 percent gypsum (EPRI, 2011), a mineral chemically comprised of calcium-sulfate ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ). Elemental or total composition analyses on FGD gypsum indicates that the remaining 1 to 4 percent of FGD gypsum is largely comprised of magnesium (Mg), iron (Fe), and sodium (Na).

SPLP (synthetic precipitation leaching procedure) studies of 32 FGD gypsum samples were performed to provide a relative leachability of trace constituents exposed to precipitation. The key components of FGD gypsum, calcium and sulfate, are present in leachates at much higher concentrations with average concentrations of 672 and 1300 mg/L, respectively. Barium ranged from 0.0019 mg/L to 0.048 mg/L with an average of 0.027 mg/L (EPRI, 2011 and EPRI, 2012). Therefore, a signature profile of FGD gypsum leachates would generally be characterized by:

- *Elevated concentration of calcium (hundreds, mg/L)*
- *Elevated concentration of sulfate (hundreds to low thousands, mg/L)*
- *Elevated concentrations of boron, chloride, bromide, and fluoride*

The graph below depicts the results of the study. The range of concentrations from the FGD gypsum samples are listed on the y-axis, with the SPLP median values sorted from high to low and indicated with green diamonds.





(EPRI, 2011)

FGD gypsum data obtained from sedimentation ponds at the nearby Gorgas Gypsum Pond shows a similar profile as the referenced EPRI study. This data shows barium concentrations ranging from 0.013 to 0.020 mg/L. A review of historical groundwater chemistry collected from well GN-GSA-MW-1 combined with additional geochemistry data gathered from wells site-wide was conducted to evaluate the source of statistically significant concentrations of barium in compliance well GN-GSA-MW-1. The data and discussion below provide strong evidence that barium detected in GN-GSA-MW-1 is from a source other than the Plant Gaston Gypsum Pond.

### 2.2.1 FGD Indicator Parameters

A review of FGD gypsum indicator parameters such as boron, calcium, chloride, total dissolved solids, and sulfate suggest that groundwater quality analyzed in well GN-GSA-MW-1 is not consistent with that of an FGD leachate plume. Data shows that concentrations of FGD gypsum indicator parameters in well GN-GSA-MW-1 are present at lower concentrations than in upgradient wells and significantly lower than expected concentrations from FGD leachate. **Table 2, Summary of FGD Indicator Constituents**, provides the tabulated data discussed in this section.

Boron concentrations in well MW-1 range from 0.028 mg/L to 0.04 mg/L, which are comparable to or lower than the average upgradient boron levels of 0.10 mg/L. Calcium concentrations in upgradient wells ranged from 4.62 mg/L to 109 mg/L, while sulfate concentrations range from 1.77 mg/L to 32.6 mg/L. In contrast, calcium and sulfate concentrations in well GN-GSA-MW-1 ranged from 34.3 mg/L to 47.8 mg/L, and 2.95 mg/L to 6.06 mg/L, respectively. Since CCR

leachate concentrations of boron, calcium, sulfate, and other indicator parameters are expected to be significantly higher in upgradient wells, it is reasonable to assume that chemical composition of groundwater in well GN-GSA-MW-1 is not impacted from CCR leachate but rather from a different source. **Figure 7, Sulfate Concentrations at GN-GSA-MW-1 vs. Upgradient Wells**, and **Figure 8, Calcium Concentrations at GN-GSA-MW-1 vs. Upgradient Wells**, depicts a time series plot of each indicator constituent concentration from GN-GSA-MW-1 against the four upgradient well locations.

Pearson correlation coefficients were calculated for key indicator parameter concentrations (sulfate, calcium, fluoride, chloride, and boron) against the reported barium concentrations from well GN-GSA-MW-1 from 2016 to 2022. This statistical approach is a measure of the linear correlation, or strength and direction of the linear association between two variable sets of numerical data. A summary of the results including an explanation of coefficient values are listed in the table below. Based on the resulting ‘poor-to-moderately’ classified correlations (with exception of calcium), it is evident that barium concentrations detected in GN-GSA-MW-1 during each sampling event do not strongly correlate with the associating indicator constituents. Therefore, supporting the lines of evidence that barium exceedances at this well location are likely attributed to a source other than the Gypsum Pond.

<b>Correlation Coefficients of Indicator Constituents vs Barium at GN-GSA-MW-1</b>	
<b>Indicator Constituent</b>	<b>Average Correlation Pearson Coefficient</b>
Sulfate	0.03
Calcium	0.85
Chloride	-0.45
Fluoride	-0.05
Boron	0.50
<i>Explanation of Coefficient Values</i>	
<b>Pearson Coefficient</b>	<b>Classification</b>
<i>(+/-) 0.0 - 0.19</i>	<i>Poor Correlation</i>
<i>(+/-) 0.2 - 0.39</i>	<i>Weak Correlation</i>
<i>(+/-) 0.4 - 0.69</i>	<i>Moderate Correlation</i>
<i>(+/-) 0.7 - 0.85</i>	<i>Strong Correlation</i>
<i>(+/-) 0.86 - 1.0</i>	<i>Very Strong Correlation</i>

### 2.2.2 Major Cations and Anions – Piper Diagram

Groundwater chemical compositions were characterized by the analysis of major cations and anions in groundwater in the uppermost aquifer underlying the Plant Gaston Gypsum Pond. A Piper (trilinear) diagram was generated from the October 2021 groundwater data to depict the

hydrogeochemical facies. The data indicates that the dissolved constituents in groundwater consist of alkali earth cations (magnesium and calcium) and bicarbonate anions in monitoring well GN-GSA-MW-1. The data plotted on **Figure 9, Piper Trilinear Diagram (10/04/2022)**, shows that groundwater sampled from GN-GSA-MW-1 falls within the calcium-magnesium bicarbonate facies (or water type). Similarly, most groundwater samples from site wells also exhibit these facies (with exception of GN-GSA-MW-6, 5, 11, and 15 as sodium-chloride and mixed type facies). Characteristics of the calcium-magnesium bicarbonate water facies reflect meteoric sourced groundwater with flow and dissolution through carbonate rock. The similarity of MW-1 hydro-chemical signature to those of upgradient wells indicates that concentrations of major and trace elements including barium in MW-1 are likely to have a natural source. Conversely, an FGD leachate would plot at the top of the Piper plot (calcium chloride/sulfate water type).

### 2.3 Natural Sources

Barite (barium sulfate,  $\text{BaSO}_4$ ) and witherite (barium carbonate,  $\text{BaCO}_3$ ) are the predominate occurring barium-containing minerals and are comprised of approximately 60 to 70 percent barium by weight. Witherite deposits normally occur in smaller quantities and are more discontinuous, thus difficult to mine (Johnson et al., 2017). Witherite typically contains small amounts of strontium and calcium substituting for barium. Other sources of barium included in the natural environment include benstonite, sanbornite, and celisan. These minerals usually occur in small, less concentrated, and less widespread deposits.

Barium in the environment is predominately sourced by natural rock weathering. The concentration of barium in natural waters is controlled by the solubility of barium compounds, the tendency of barium to adsorb to particulates, and the availability of dissolved sulfate to carbonate to form insoluble salts (ATSDR, 2007). Barium can be leached by groundwater in some locations, where the presence of barium-containing minerals in the host rock has given rise to relatively high concentrations in groundwater (ATSDR, 2007).

Barium has limited mobility in the environment because of its tendency to form insoluble compounds under normal conditions. The barium released from minerals during weathering tends to precipitate as barite or witherite ( $\text{BaSO}_4$ ,  $\text{BaCO}_3$ ) or to adsorb onto clay minerals, oxides, or hydroxides. Barium is considered insoluble in oxidizing environments and highly resistant to weathering. The solubility of barium compounds increases as conditions become reducing or acidic (Johnson et al., 2017).

Naturally occurring deposits of barite and witherite can be classified into the following four groups based on physical characteristics, geochemical characteristics, and geologic setting: (1) bedded sedimentary; (2) bedded-volcanic; (3) vein, cavity-fill, metasomatic; and (4) residual. The development of thick residual soils has concentrated barite into commercial deposits throughout Georgia, Alabama, and Tennessee. Many major deposits lie beneath regional unconformities and disconformities and show strong correlation with lineaments and deformation features such as faulting and folding (Clark and Neeley, 1983). Lineaments representative of fracture zones exhibit

remarkable correlation with many of the hydrothermal mineral deposits of the Valley and Ridge province in Alabama (Drahovzal et al., 1975). The Site lies within southern Shelby County, within the southwestern portion of the Harpersville, Alabama 7.5-minute quadrangle. This area, described by Thomas and Drahovzal (2012) as geologically complex, includes the Harpersville transverse zone that trails along the Appalachian sedimentary thrust belt. Transverse zones have been shown to be sites of intense fracturing leading to enhanced capacity for mineralization.

Historically, the nonenergy mineral industry has been an important economic base to Shelby County, Alabama. Major deposits of high-quality limestone and dolomites were extensively quarried throughout the county. Natural occurrences of barium-containing minerals in Shelby County are abundant and have been proven as economically mineable material. Quarrying of barite primarily occurred in the early twentieth century in southeastern Shelby County near the Harpersville-Wilsonville-Vincent area (Adams and Jones, 1940). Furthermore, the Harpersville-Wilsonville-Vincent area was allocated as one of nine major barite mining districts in the state during this time. Exploration efforts were focused on outcrop areas exhibiting heavily faulted zones of carbonate lithologies. Within this district, Adams and Jones (1940) states that the majority of barite occurs as small irregular masses in the residual clays by weathering from the Newala limestones.

Barium concentrations were analyzed in spring water from the Blount Springs area, approximately 30 miles north of Birmingham. The source of barium in the spring water could not be determined with much certainty but was concluded that it derived from barite deposits in the hydraulically connected deeper formations of Cambro-Ordovician and Ordovician aged rocks (Adam and Jones, 1940). Results of the analysis reported concentrations of naturally occurring barium in spring water at 4.6 parts per million (ppm).

### *2.3.1 Natural Occurrences of Barium at the Site*

Additional analytical testing of soils and groundwater samples from GN-GSA-MW-1 and nearby piezometers indicate natural occurrences of barium-containing mineralogy. The location of the site and location of well GN-GSA-MW-1, proximal to a mapped fault and other structural elements, fit the model for barium enrichment described by Adam and Jones (1940). To evaluate these potential occurrences, select intervals of samples were analyzed for the presence of barium, calcium, and strontium constituents.

The core and soil samples originating from the drilling and installation of the on-Site compliance wells in 2015 were subsequently placed in their respective core boxes, labeled, catalogued, and stored at Southern Company's Civil Field Services office located at Logan Martin Dam. Amid the sample storage field visit in February 2022, it was determined that only limited intervals of the core samples were available for collection from the GN-GSA-MW-1 core box. Targeted samples from the screened interval (113' to 123' BGS) were not readily accessible from sample storage.

On February 16, 2022, samples were taken to APC's Environmental Laboratory (APCEL) in Calera, Alabama for analysis of the requested trace metals (ICP-AES) by EPA Method

3051A/6010B. A copy of APC’s laboratory analytical report is provided in **Appendix A, Core Sample Analytical Results**. A summary of analytical results from the acquired sample interval is listed in the table below.

<b>Core Sample Analytical Results</b>				
<b>Well ID</b>	<b>Sample Depth</b>	<b>Barium</b>	<b>Calcium</b>	<b>Strontium</b>
	ft. BGS	mg/kg	mg/kg	mg/kg
<b>GN-GSA-MW-1</b>	58.0 - 58.5	137	12,400	63.1

Despite the limitations during sample collection, the resulting concentration of barium from the sampled interval indicates the occurrence of barium-containing source mineralogy within the underlying subsurface soils and/or rock. However, additional sample analysis at depths from primary targeted zones (e.g., weathered residuum, fractures, surrounding the well screen) is preferred for augmenting evidence of an alternate source.

Groundwater in fractured bedrock environments is likely susceptible to changes in chemistry due to the water-rock interactions. Furthermore, the anomalous barium concentrations detected in GN-GSA-MW-1 are likely attributable to the depth of the screened interval within rock where residual clay intervals, structural discontinuities, and fracture mineralization often elicit reactions such as dissolution, adsorption, and precipitation at mineral-fluid interfaces along groundwater flow paths.

Additional efforts as part of the demonstration included a separate groundwater sampling event from a nearby piezometer proximal to GN-GSA-MW-1. It was determined that the piezometer location GS2-4, located approximately 320 feet upgradient and to the east, was installed in 2014 as part of a phase II investigation for potential expansion at the Plant Gaston Gypsum Pond. During drilling and installation activities, the top of competent bedrock was encountered at approximately 19.0 feet below ground surface (BGS) and was screened a total of ten feet across the overburden-top of rock interface. This piezometer location is currently utilized for water-level data only and is not routinely sampled during semi-annual monitoring events. A summary of the construction details for GS2-4 is listed in the table below. The complete boring log for GS2-4 is provided in **Appendix B, Well Construction and Boring Logs**.

<b>GS2-4 Piezometer Construction Details</b>						
<b>Piezometer</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Total Well Depth (ft. BGS)</b>	<b>Land Surface Elevation (ft. NAVD)</b>	<b>TOC Elevation (ft. NAVD)</b>	<b>Screened Interval (ft. BGS)</b>
GS2-4	33.2558	-86.4572	24.20	414.25	417.52	14.0 - 24.0

On April 12, 2022, APC field personnel purged the piezometer a total of three well volumes, measured natural attenuation parameters, and collected a groundwater sample for subsequent

laboratory analysis of Appendix III constituents with the addition of barium. The resulting analytical report as provided by APCEL on April 27, 2022, can be referenced in **Appendix C**. A summary of the results is listed in the table below.

<b>GS2-4 Groundwater Analytical Results (04/12/2022)</b>		
<b>Appendix III Parameters</b>		
<b>Analyte</b>	<b>Units</b>	<b>Result</b>
Boron	mg/L	<0.03
Calcium	mg/L	91
Chloride	mg/L	4.93
Fluoride	mg/L	0.0798
pH	SU	6.29
Sulfate	mg/L	23.2
TDS	mg/L	322
<b>Appendix IV Parameters</b>		
<b>Analyte</b>	<b>Units</b>	<b>Result</b>
Barium	mg/L	0.0781

The detected concentration of barium at GS2-4 (0.0798 mg/L) is comparable to or lower than other concentrations reported from the remaining compliance wells. Accordingly, indicator constituents such as boron, chloride, and sulfate are also low. **Figure 10, Geologic and Hydrogeochemical Cross-Section A – A'**, depicts the averaged analytical results of barium and select indicator constituents along a north-to-south trending line of section along the eastern boundary of the Gypsum Pond. This line of section includes well locations GN-GSA-MW-10, 11, 12, 13, 1, 2, and GS2-4. In addition to the differences between well screen depth and outlying barium concentrations at GN-GSA-MW-1, the proximal location of GS2-4 can be seen. The resulting barium concentration from the upgradient shallow well (0.0798 mg/L) located 300 feet to the east suggests that increased barium concentrations are restricted to deeper groundwater screened within the bedrock.

In 2021, a monitored natural attenuation (MNA) demonstration was conducted by Anchor QEA, LLC at the Plant Gaston Ash Pond to support the viability of the Site's corrective-action remedy. Part of the investigation included laboratory analyses of well solids samples for bulk chemistry utilizing X-ray fluorescence (XRF) techniques. A summary of results is listed in the table below. Analysis shows elevated concentrations of barium from well solids samples at select well locations surrounding the Ash Pond. It was concluded that elevated barium concentrations were closely associated with elevated arsenic, possibly indicating a mineral association between the two constituents (e.g., barium arsenate) (Anchor, 2021). The data reveals the presence of elevated barium detected from a non-FGD gypsum impoundment on-Site and supports additional evidence for an alternate or naturally occurring source.

Sample ID	Depth (ft. bgs)	Barium (ppm)	Calcium (ppm)	Magnesium (ppm)
GN-AP-MW-16V	11.5–12.5	356	2714	4,690
GN-AP-MW-16V	19.5–20	301	2170	ND
GN-AP-MW-17V	12–15	812	647	6,185
GN-AP-MW-17V	19–20	330	3787	3,983
GN-AP-MW-30H	20.4–21.2	361	6783	3,908
GN-AP-MW-31V	30.5-31.5	345	8119	2,575

## 2.4 GN-GSA-MW-1 Well Construction

Monitoring well GN-GSA-MW-1 was screened much deeper with respect to the remaining monitoring wells at the site due to the absence of saturation in overburden material and near the overburden-bedrock interface. During the drilling and installation at the well location, a defined water table boundary representative of the uppermost aquifer was difficult to identify. GN-GSA-MW-1 was screened at depths between 113 and 123 feet BGS. **Figure 10, Geologic and Hydrogeochemical Cross-Section A – A'**, illustrates the differences in well screen depths from GN-GSA-MW-1 and remaining monitoring wells along the selected line of section. These differences range from approximately 60 to 100 feet in variation from the surrounding shallow well locations. The boring log denotes multiple shale intervals, fractures, fracture mineralization, and slickenside signatures typical of faulted zones. The remaining monitoring well network was screened across overburden materials, overburden-top of rock interface, and shallow rock, to which, were generally between 30 and 60 feet BGS. **Appendix B, Well Construction and Boring Logs**, provide lithological descriptions and well construction information during installation of GN-GSA-MW-1.

Due to the anomalous depths and well construction at GN-GSA-MW-1, it is apparent that the well is not representative of the upper most saturated zone. This is best reflected in field parameters such as pH and ORP with both reflecting more interaction with rock and geologic strata (lower ORP/higher pH). Therefore, we believe one solution would consist of installing a replacement compliance well within the immediate vicinity at more shallow depths. Furthermore, a secondary option is to convert a nearby shallow piezometer, such as GS2-4, as part of the on-Site compliance well network. A formal recommendation for such efforts can be submitted following the Department's review and comments of the ASD.

## 3.0 CONCLUSIONS

Southern Company Services has prepared this ASD to address the statistically significant result for barium observed in monitoring well GN-GSA-MW-1. Based on the review of site information, the SSL for barium in well GN-GSA-MW-1 is not related to a release or impact from the Gypsum Pond, but the result of variations in groundwater chemistry and subsurface heterogeneity not

accommodated by the site statistics. The following presents the lines of evidence supporting this conclusion:

- Barium is not typically a constituent associated with a CCR release and the SSL for barium is limited to a single downgradient monitoring well location.
- CCR indicator parameters such as boron, sulfate, chloride, and calcium in well GN-GSA-MW-1 are not elevated above background concentrations.
- Elevated barium concentrations are not observed in nearby monitoring wells that are screened more shallow and more likely to be impacted by a release from the Gypsum Pond.
- Barium concentrations at GN-GSA-MW-1 have remained relatively stable over time with no evidence of variability that may be indicative of a leachate release.
- Well GN-GSA-MW-1 is screened significantly deeper than other downgradient well locations and may not exhibit conditions representative of the uppermost saturated zone.

This document presents an ASD for statistically significant concentrations of barium over the GWPS in groundwater samples collected from well GN-GSA-MW-1. This ASD has been prepared pursuant to 40 CFR §257.95(g)(3)(ii) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(ii) and demonstrates that the Gypsum Pond is not the cause of the reported barium SSL. Based on the findings presented in this report, the site should not implement an assessment of corrective measures pursuant to 40 CFR §257.96 and ADEM Admin. Code r. 335-13-15-.06(7).



#### 4.0 REFERENCES

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- Thomas, W.A., and Drahovzal, J.A., 2012, Bedrock geology of the Harpersville 7.5-minute quadrangle, Shelby and Talladega Counties, Alabama: Alabama Geological Survey Quadrangle Series Map 57, 34 p.

# Tables



**Table 1. Barium Concentrations in well GN-GSA-MW-1  
Plant Gaston Gypsum Pond**

<b>GN-GSA-MW-1</b>	
<b>Date</b>	<b>Barium (mg/L)</b>
3/24/2016	1.43
5/10/2016	1.83
7/5/2016	1.71
9/6/2016	1.65
11/8/2016	1.6
2/22/2017	1.53
5/31/2017	1.66
7/5/2017	1.66
2/5/2018	1.8
6/12/2018	2.32
10/23/2018	2.22
5/21/2019	2.51
9/4/2019	1.96
2/12/2020	2.15
9/9/2020	2.5
4/13/2021	2.41
10/4/2021	1.92
2/8/2022	2.32

mg/L = milligrams per liter

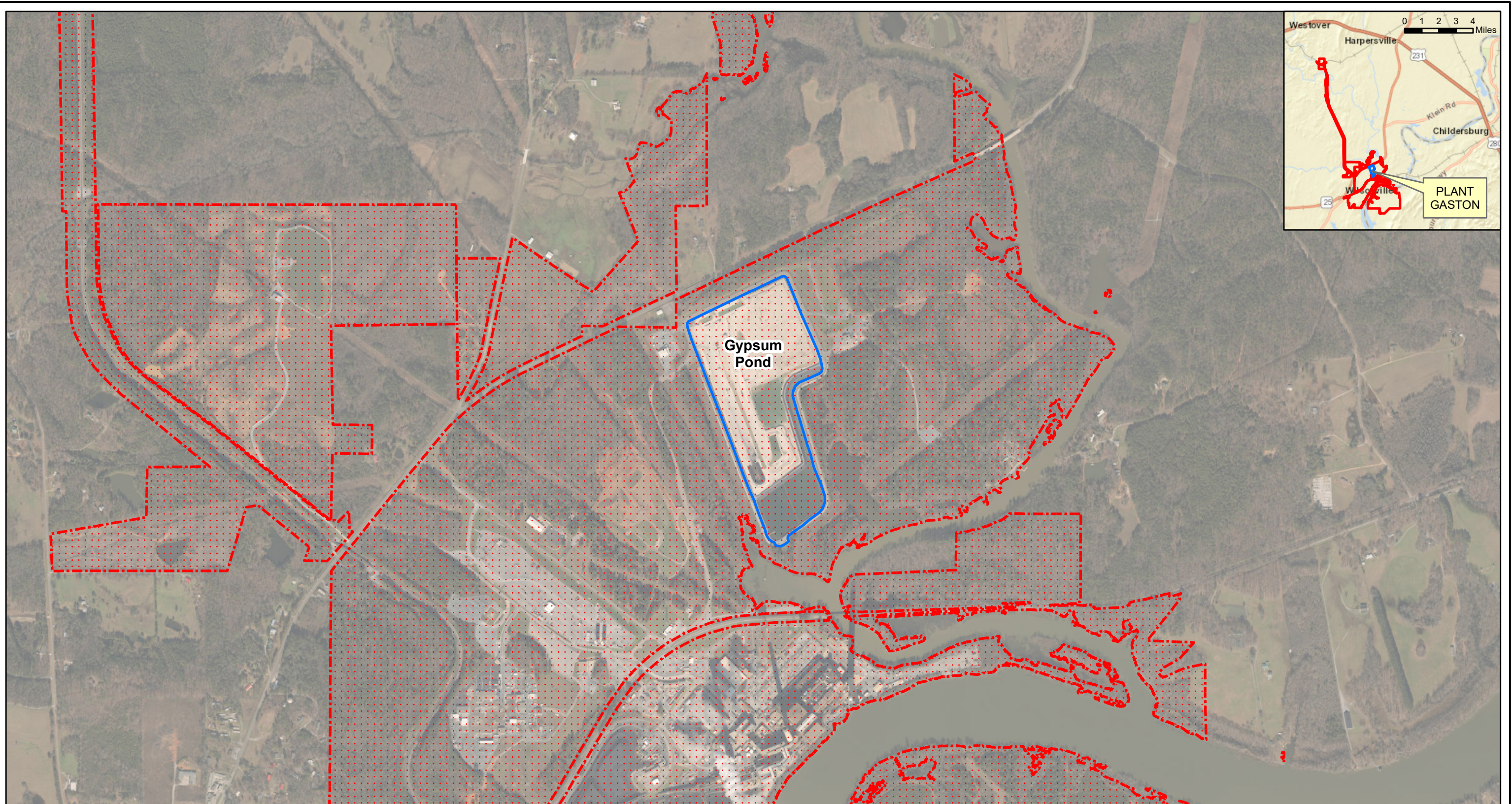
**Table 2. Average Concentrations of FGD Gypsum Indicator Constituents**

<b>Appendix III Analyte</b>	<b>Boron (mg/L)</b>	<b>Calcium (mg/L)</b>	<b>Chloride (mg/L)</b>	<b>Fluoride (mg/L)</b>	<b>Sulfate (mg/L)</b>
<i>Median Concentrations of FGD Gypsum Leachate (EPRI, 2011)</i>	0.189	672	10.3	4.9	1,300
<b>Well ID</b>	<b>Average Concentration (mg/L)</b>				
GN-GSA-GS2-4	0.101	91.000	4.930	0.080	23.200
GN-GSA-MW-1	0.034	39.984	2.575	0.319	4.196
GN-GSA-MW-10	0.100	97.161	2.932	0.098	2.120
GN-GSA-MW-11	0.038	11.149	7.142	0.097	5.279
GN-GSA-MW-12	0.059	71.878	3.362	0.083	8.654
GN-GSA-MW-13	0.100	89.000	3.549	0.074	8.122
GN-GSA-MW-14S	0.096	49.333	3.590	0.098	7.214
GN-GSA-MW-15	0.100	6.976	2.406	0.114	2.872
GN-GSA-MW-2	0.100	82.000	3.622	0.093	7.629
GN-GSA-MW-3	0.100	80.683	2.958	0.080	15.140
GN-GSA-MW-5	0.069	62.778	9.862	0.093	51.067
GN-GSA-MW-6	0.100	0.829	3.152	0.114	2.486
GN-GSA-MW-7	0.100	66.361	3.528	0.102	9.118
GN-GSA-MW-8	0.100	55.778	1.809	0.129	2.760
GN-GSA-MW-9	0.100	50.772	2.343	0.081	5.259

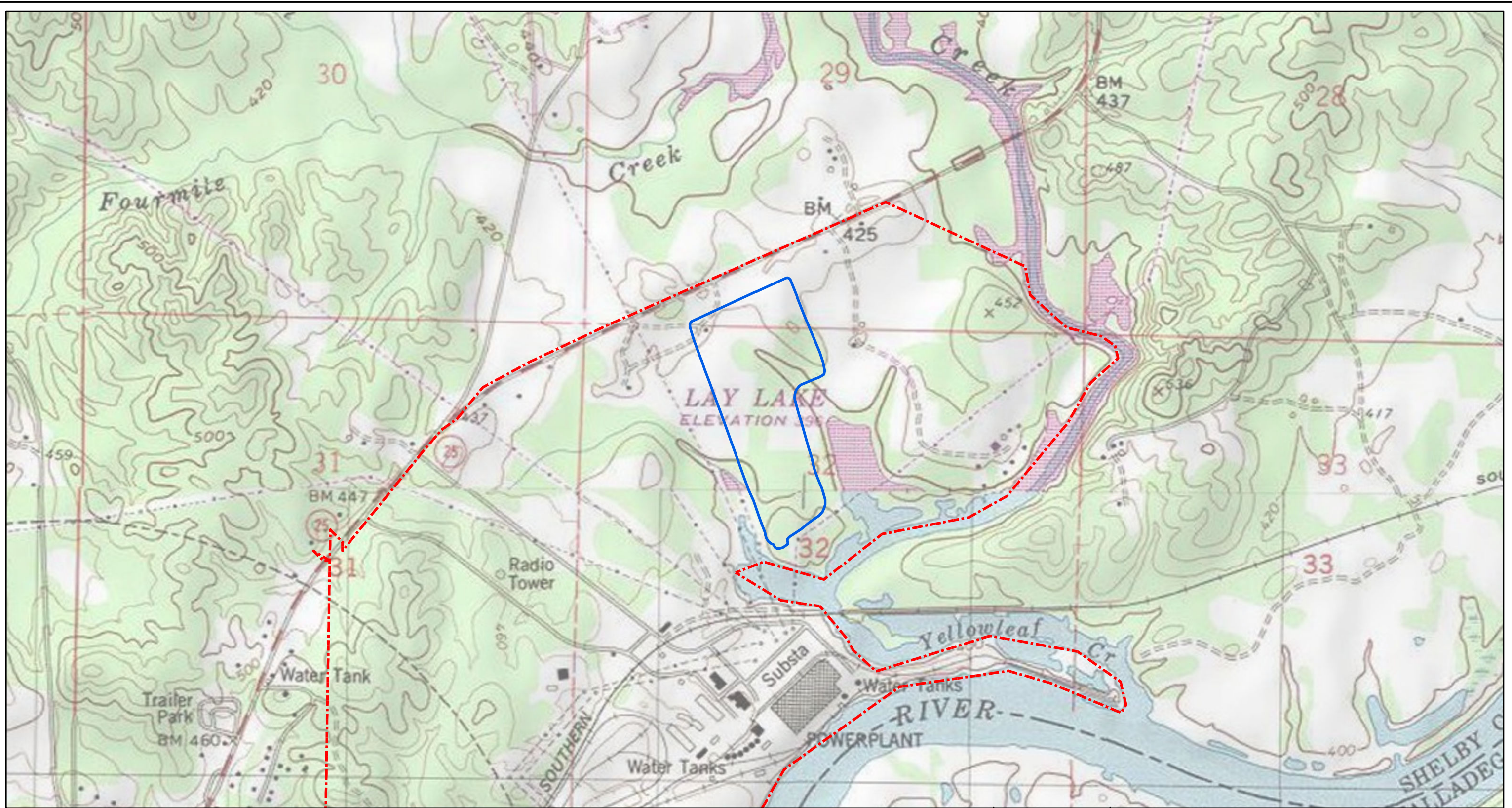
Notes:

mg/L - milligrams per liter, s.u. - standard units

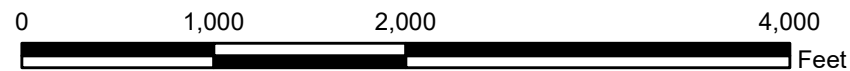
# Figures



<b>Legend</b> Gypsum Pond Boundary Property Boundary (Approximate)				SCALE 1:12000	DRAWING TITLE <b>SITE LOCATION MAP          PLANT GASTON GYPSUM POND</b>
		DATE 11/13/2020	FIGURE NO <b>FIGURE 1</b>		
		DRAWN BY KWR	Southern Company		
		CHECKED BY GBD			



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

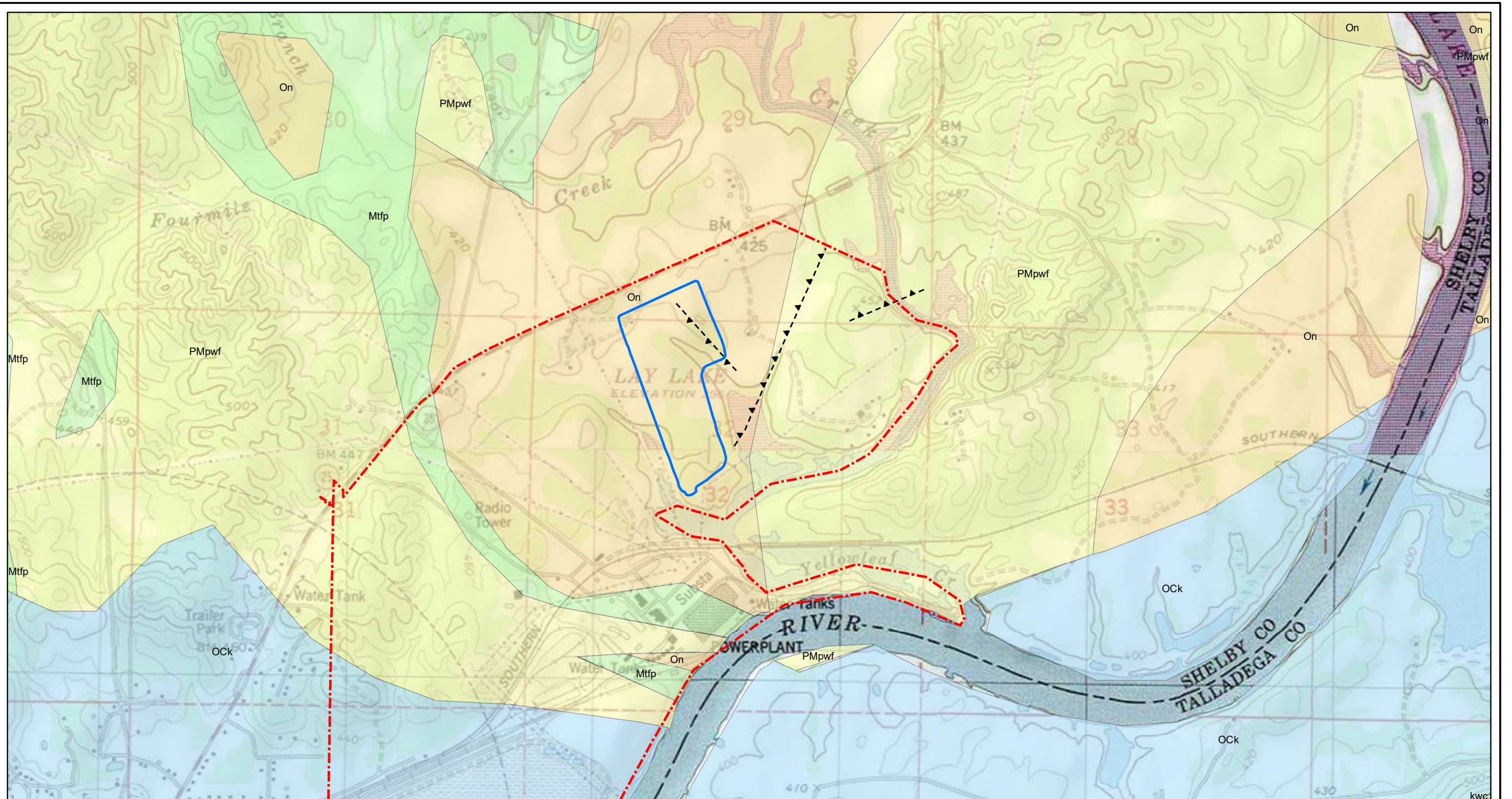


SCALE	1:12000
DATE	12/17/2019
DRAWN BY	KWR
CHECKED BY	GBD

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

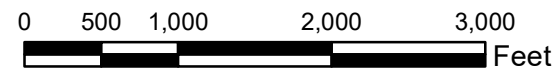
FIGURE NO  
**FIGURE 2**





**Legend**

- |                                 |                                   |  |
|---------------------------------|-----------------------------------|--|
| Gypsum Storage Area Boundary    | <b>Geologic Units</b>             | Parkwood Formation and Floyd Shale undifferentiated (PMpwf)      |
| Property Boundary (Approximate) | Knox Group undifferentiated (Ock) | Tuscumbia Limestone and Fort Payne Chert undifferentiated (Mtfp) |
| Fault                           | Newala Limestone (On)             |  |



SCALE 1:15000

DATE 11/24/2021

DRAWN BY KWR

CHECKED BY GBD

DRAWING TITLE

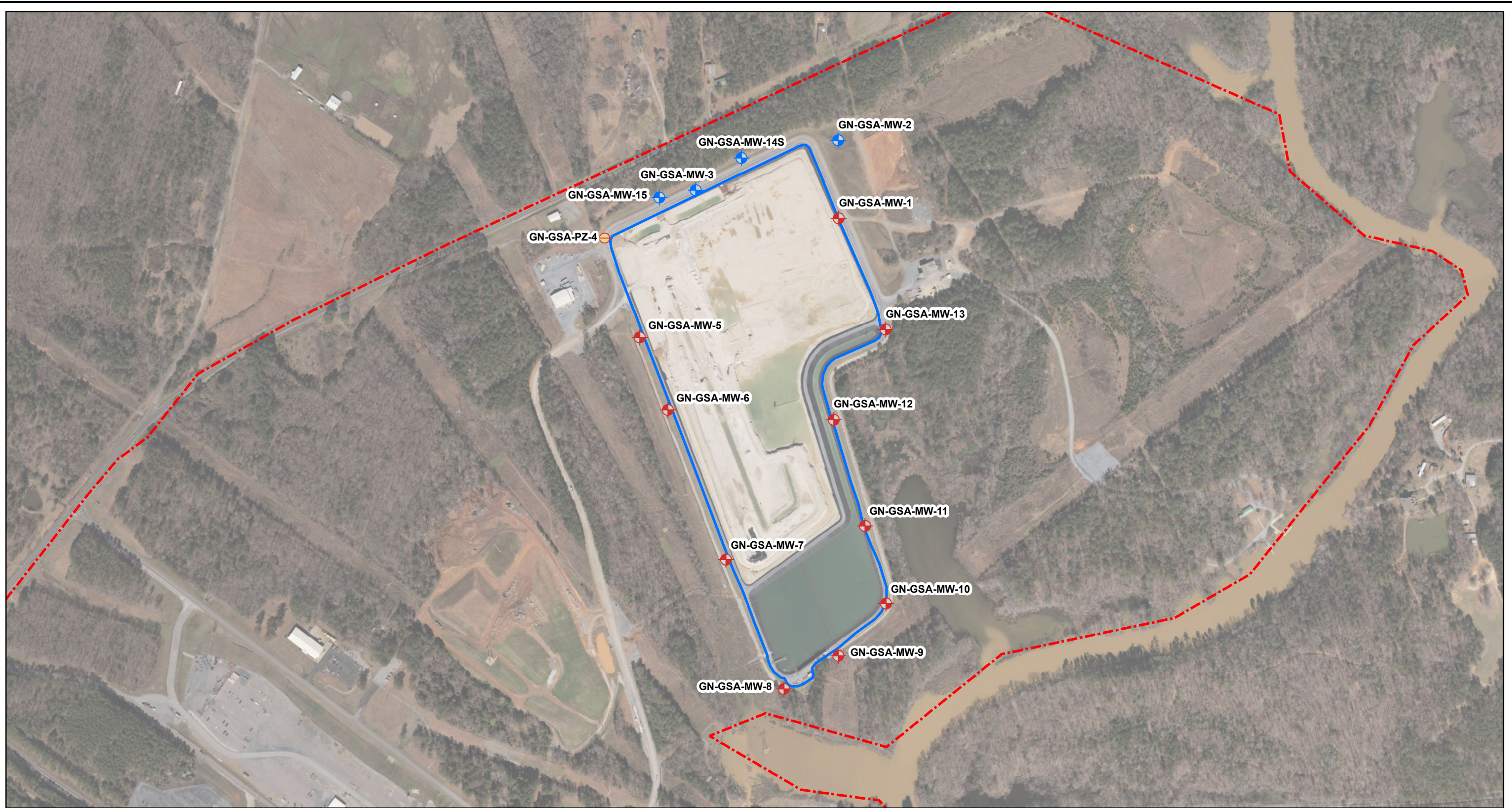
**SITE GEOLOGIC MAP  
PLANT GASTON GYPSUM POND**

FIGURE NO

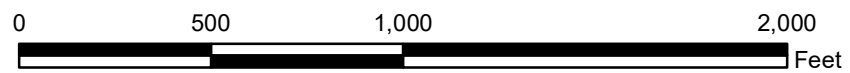
**FIGURE 3**







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



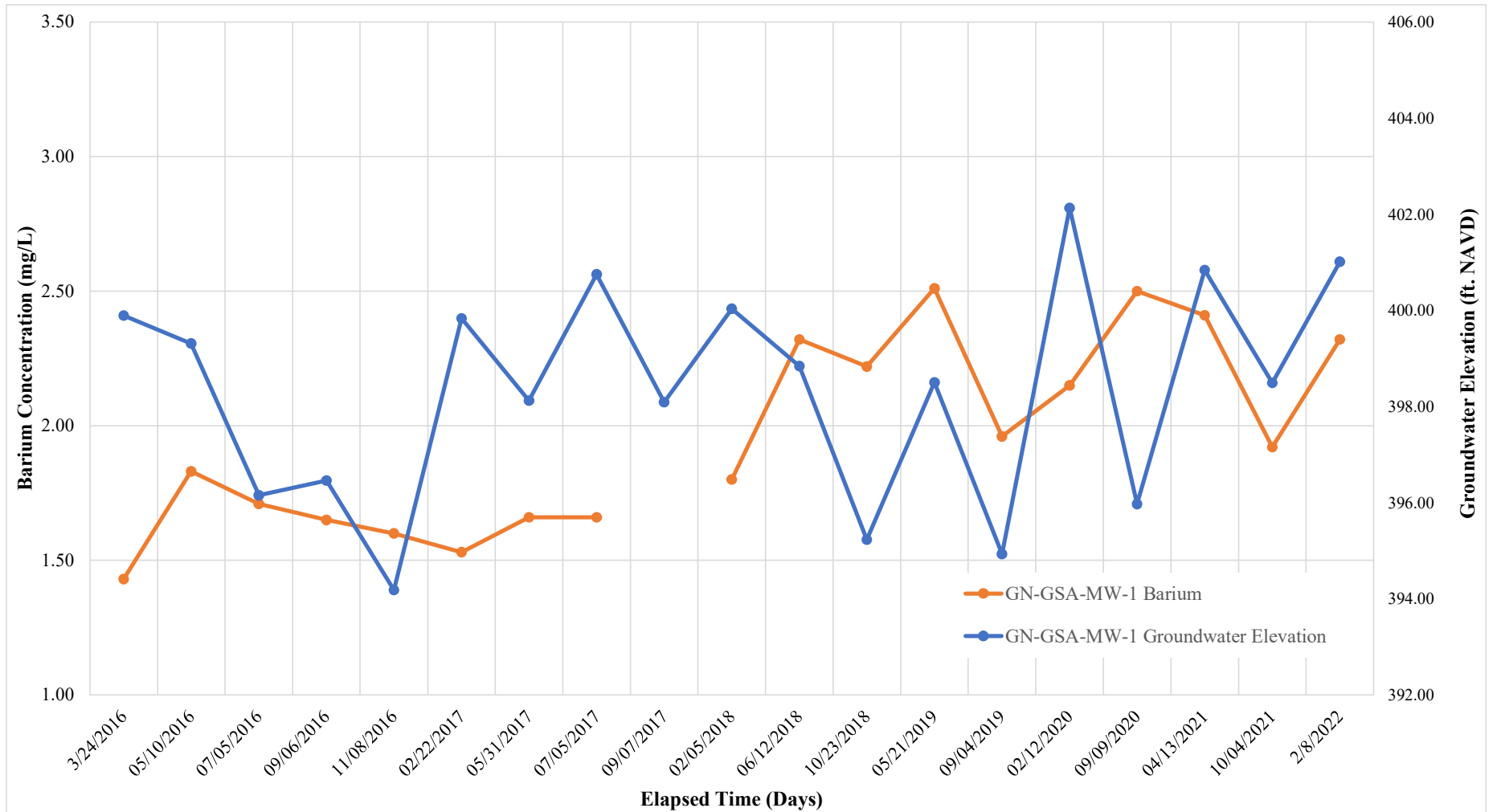
SCALE	1:6000
DATE	1/9/2020
DRAWN BY	KWR
CHECKED BY	GBD

DRAWING TITLE	
MONITORING WELL LOCATION MAP PLANT GASTON GYPSUM POND	
FIGURE NO	<b>FIGURE 4</b>

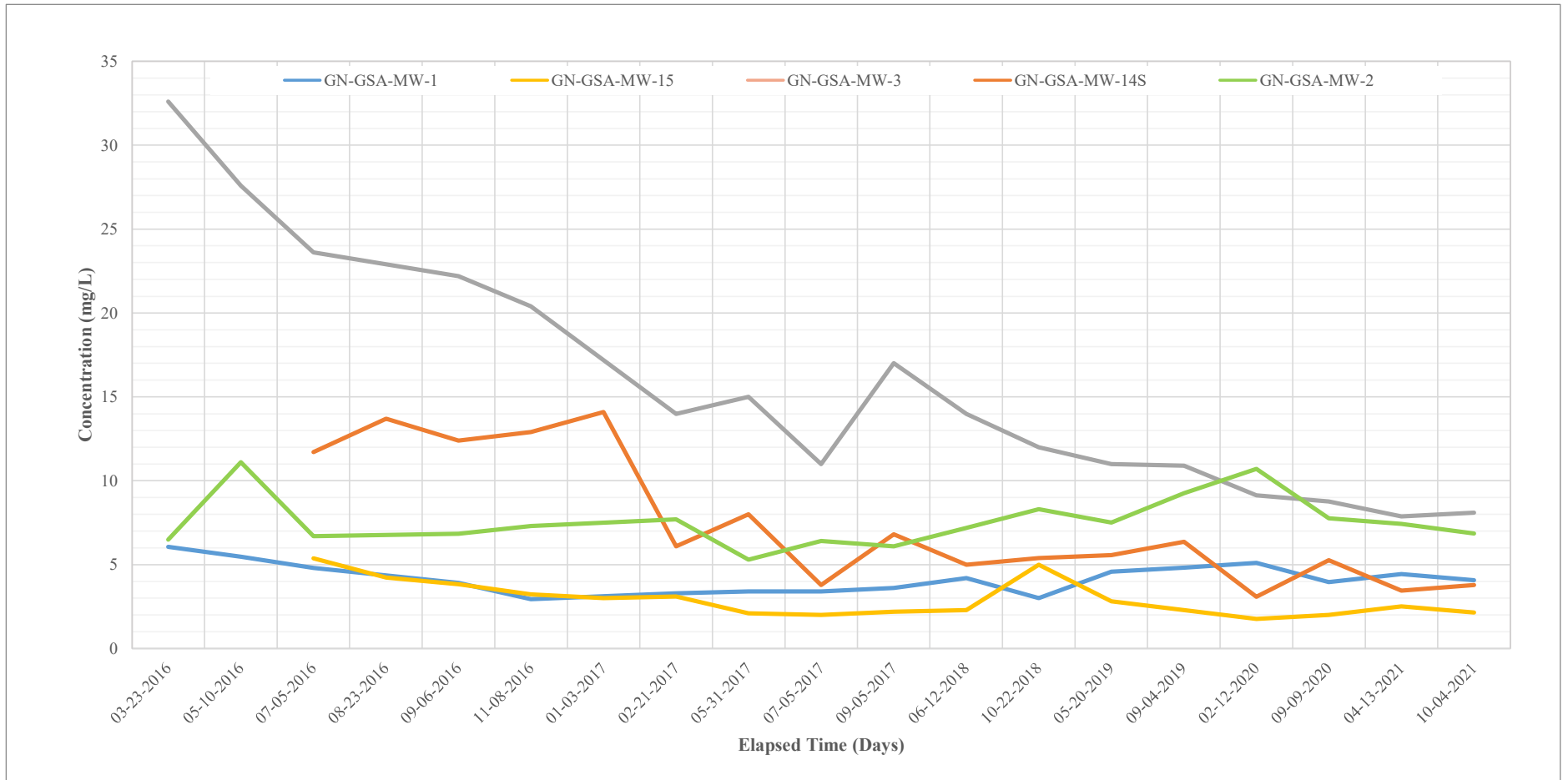




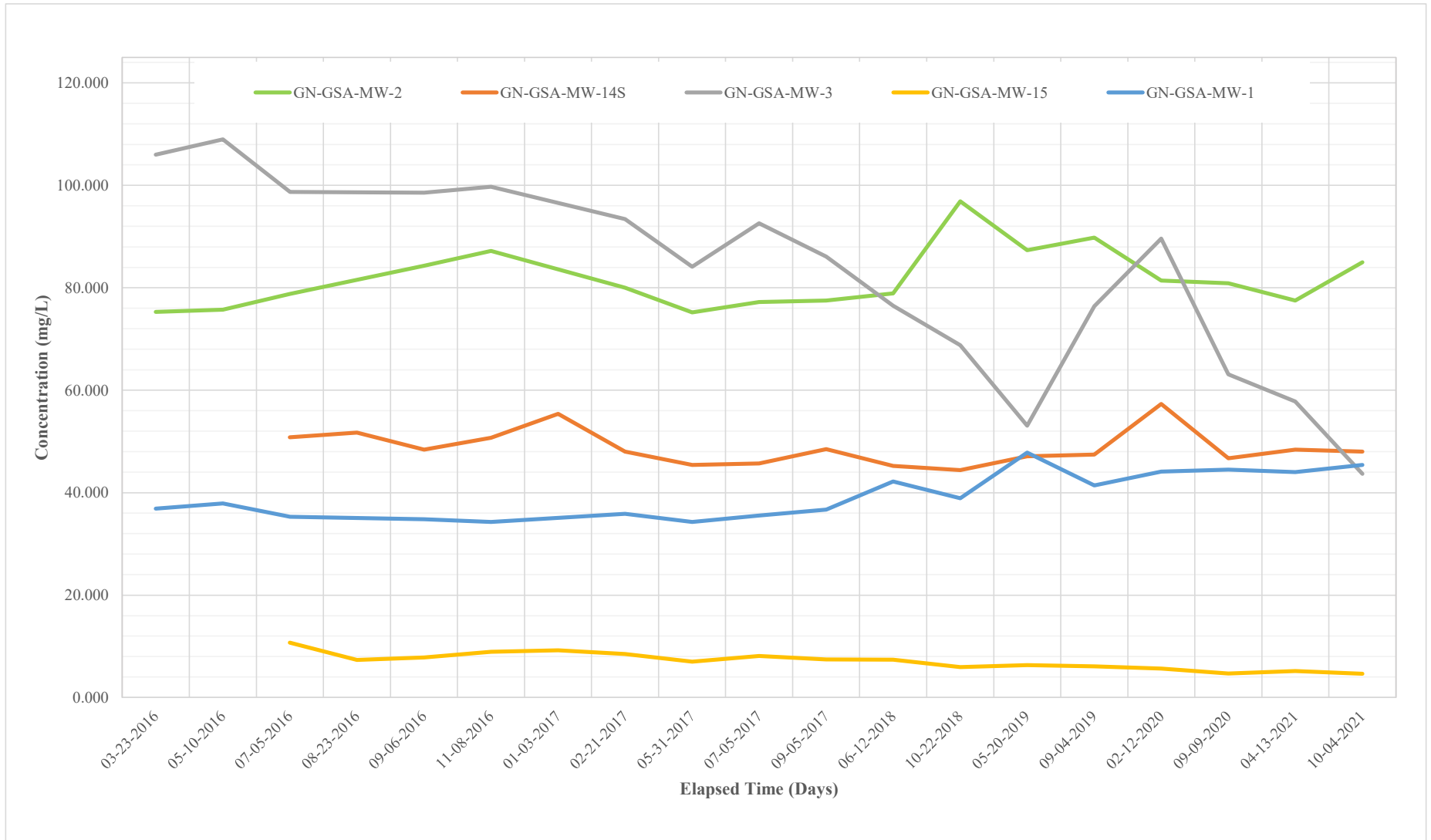
**Figure 6.**  
**GN-GSA-MW-1 Barium Concentration vs Groundwater Elevation**  
**Plant Gaston Gypsum Pond**  
**(03/24/2016 - 02/08/2022)**



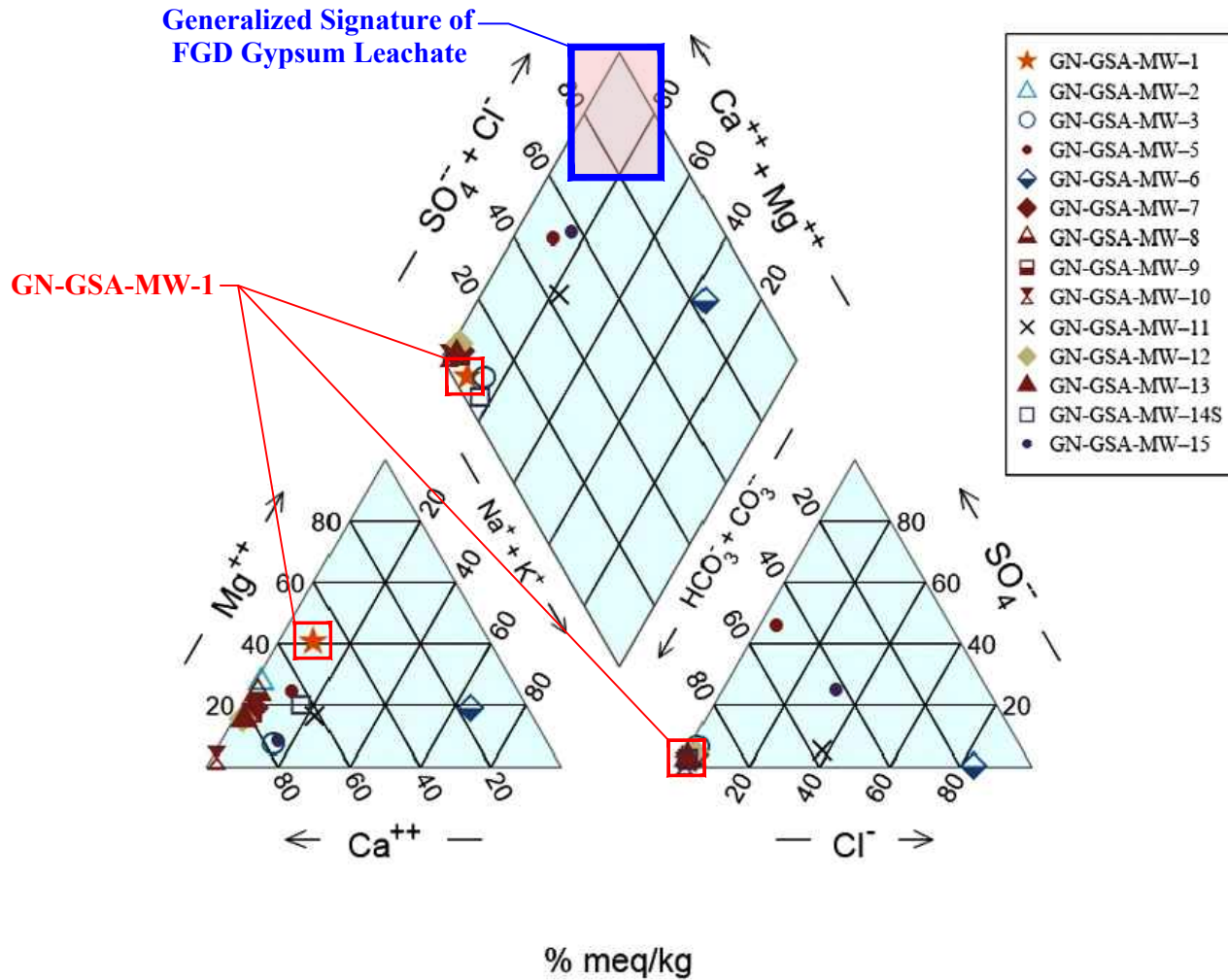
**Figure 7.**  
**Sulfate in GN-GSA-MW-1 vs. Upgradient Wells**  
**Plant Gaston Gypsum Pond**  
**(03/22/2016 - 10/04/2021)**



**Figure 8.**  
**Calcium in GN-GSA-MW-1 vs. Upgradient Wells**  
**Plant Gaston Gypsum Pond**  
**(03/22/2016 - 10/04/2021)**



**Figure 9.**  
**Piper Trilinear Plot (10/04/2021)**  
**Plant Gaston Gypsum Pond**



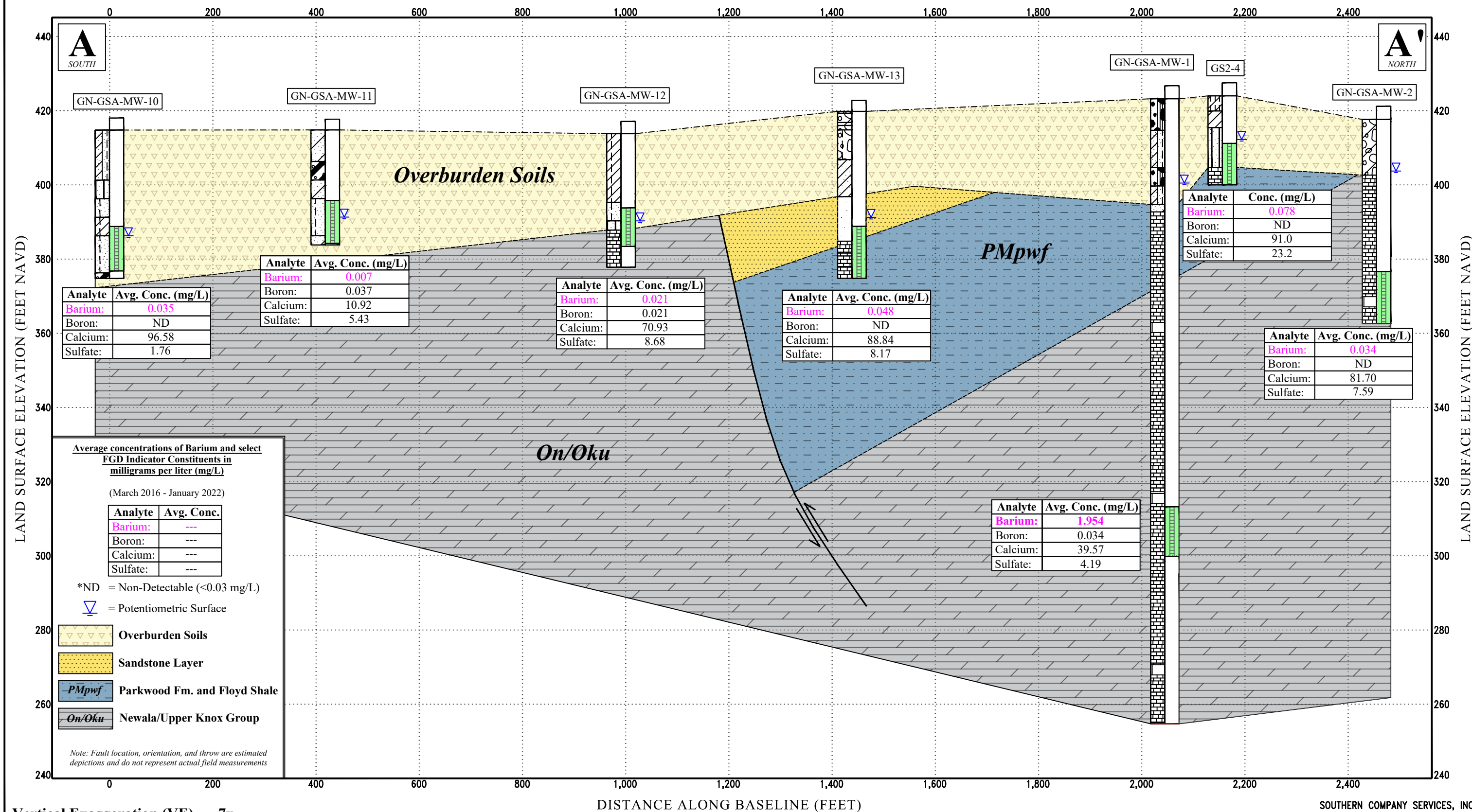


DRAWN BY: A C P  
 CHECKED BY: G D B  
 DATE: 04/29/2022  
 REVISION No.: 003  
 SCALE: AS SHOWN  
 OPERATING CO.: ALABAMA POWER COMPANY  
 PLANT NAME: PLANT GASTON  
 CCR UNIT: GYPSUM STORAGE AREA  
 PROJECT LOCATION: WILSONVILLE, ALABAMA

## FIGURE 10. GEOLOGIC AND HYDROGEOCHEMICAL CROSS-SECTION A - A'

ALTERNATE SOURCE DEMONSTRATION (ASD) REPORT

GEOLOGIC UNITS			LEGEND
	Dolomitic Limestone		Lean Clay
	Silty Clay		Sandy Lean Clay
	Clayey Sand		Silty Silt
	Clayey Gravel		Clayey-Silty Sand
	Silty Sand		Well-Graded Gravel w/ Silt
	Silty Gravel		Unit Boundary
	Sandy Fat Clay		Inferred Boundary
	Land Surface		Approximate Fault Location/Movement
	Screened Interval		



Analyte	Avg. Conc. (mg/L)
Barium:	0.035
Boron:	ND
Calcium:	96.58
Sulfate:	1.76

Analyte	Avg. Conc. (mg/L)
Barium:	0.007
Boron:	0.037
Calcium:	10.92
Sulfate:	5.43

Analyte	Avg. Conc. (mg/L)
Barium:	0.021
Boron:	0.021
Calcium:	70.93
Sulfate:	8.68

Analyte	Avg. Conc. (mg/L)
Barium:	0.048
Boron:	ND
Calcium:	88.84
Sulfate:	8.17

Analyte	Conc. (mg/L)
Barium:	0.078
Boron:	ND
Calcium:	91.0
Sulfate:	23.2

Analyte	Avg. Conc. (mg/L)
Barium:	0.034
Boron:	ND
Calcium:	81.70
Sulfate:	7.59

Analyte	Avg. Conc. (mg/L)
Barium:	1.954
Boron:	0.034
Calcium:	39.57
Sulfate:	4.19

**Average concentrations of Barium and select FGD Indicator Constituents in milligrams per liter (mg/L)**  
(March 2016 - January 2022)

Analyte	Avg. Conc.
Barium:	---
Boron:	---
Calcium:	---
Sulfate:	---

\*ND = Non-Detectable (<0.03 mg/L)  
 = Potentiometric Surface

- Overburden Soils
- Sandstone Layer
- PMpwf Parkwood Fm. and Floyd Shale
- On/Oku Newala/Upper Knox Group

Note: Fault location, orientation, and throw are estimated depictions and do not represent actual field measurements

Vertical Exaggeration (VE) = ~7x

# Appendix A



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

# Certificate Of Analysis



To: Greg Dyer  
TS - Earth Sciences & Env Engr

Description: Gaston Gypsum Pond  
GN-GSA-MW-1 (158.5-159.5)

Customer Account: MISCS  
Sample Date: 2/16/22  
Received Date: 2/17/22  
P.O. Number:

Laboratory ID Number: BC03567

Name	Reference	Vio Spec	RL	Results	Units
Barium, Total	EPA 3051A/6010B		8	37.9	mg/kg
Calcium, Total	EPA 3051A/6010B		80000	352000	mg/kg
Strontium, Total	EPA 3051A/6010B		8	211	mg/kg

---

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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Comments:

CCs:

Quality Control \_\_\_\_\_ Supervision \_\_\_\_\_

Reported: 3/3/2022  
Version 3.0  
COA\_GEN

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

# Certificate Of Analysis



To: Greg Dyer  
TS - Earth Sciences & Env Engr

Description: Gaston Gypsum Pond  
GN-GSA-MW-1 (163.5-165)

Customer Account: MISCS  
Sample Date: 2/16/22  
Received Date: 2/17/22  
P.O. Number:

Laboratory ID Number: BC03568

Name	Reference	Vio Spec	RL	Results	Units
Barium, Total	EPA 3051A/6010B		8	38.7	mg/kg
Calcium, Total	EPA 3051A/6010B		80000	330000	mg/kg
Strontium, Total	EPA 3051A/6010B		8	209	mg/kg

---

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Comments:

CCs:

Quality Control \_\_\_\_\_ Supervision \_\_\_\_\_

Reported: 3/3/2022  
Version 3.0  
COA\_GEN

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

# Certificate Of Analysis



To: Greg Dyer  
TS - Earth Sciences & Env Engr

Description: Gaston Gypsum Pond  
GN-GSA-MW-1 (58-58.5)

Customer Account: MISCS  
Sample Date: 2/16/22  
Received Date: 2/17/22  
P.O. Number:

Laboratory ID Number: BC03569

Name	Reference	Vio Spec	RL	Results	Units
Barium, Total	EPA 3051A/6010B		8	137	mg/kg
Calcium, Total	EPA 3051A/6010B		800	12400	mg/kg
Strontium, Total	EPA 3051A/6010B		8	63.1	mg/kg

---

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Reported: 3/3/2022  
Version 3.0  
COA\_GEN

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

# Certificate Of Analysis



To: Greg Dyer  
TS - Earth Sciences & Env Engr

Description: Gaston Gypsum Pond  
GN-GSA-MW-2 (108-109.5)

Customer Account: MISCS  
Sample Date: 2/16/22  
Received Date: 2/17/22  
P.O. Number:

Laboratory ID Number: BC03570

Name	Reference	Vio Spec	RL	Results	Units
Barium, Total	EPA 3051A/6010B		8	<RL	mg/kg
Calcium, Total	EPA 3051A/6010B		8000	230000	mg/kg
Strontium, Total	EPA 3051A/6010B		8	92.7	mg/kg

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Comments:

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Quality Control \_\_\_\_\_ Supervision \_\_\_\_\_

Reported: 3/3/2022  
Version 3.0  
COA\_GEN

# Appendix B



# LOG OF TEST BORING

**BORING GN-GSA-MW-1**  
PAGE 1 OF 4  
ES

**SOUTHERN COMPANY SERVICES, INC.**  
**EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING**

**PROJECT** Plant Gaston Gypsum Storage Area  
**LOCATION** EC Gaston Steam Plant

**DATE STARTED** 11/4/2015 **COMPLETED** 11/5/2015 **SURF. ELEV.** Not Surveyed **COORDINATES:** \_\_\_\_\_

**CONTRACTOR** TTL, Inc. **EQUIPMENT** \_\_\_\_\_ **METHOD** Hollow Stem Auger; HQ Rock Core

**DRILLED BY** D. Campbell **LOGGED BY** J. Williams **CHECKED BY** C. Sellers **ANGLE** \_\_\_\_\_ **BEARING** \_\_\_\_\_

**BORING DEPTH** 168.5 ft. **GROUND WATER DEPTH: DURING** \_\_\_\_\_ **COMP.** \_\_\_\_\_ **DELAYED** \_\_\_\_\_

**NOTES** Begin Engineering Log at 30.5 ft. Well installed. Refer to well data sheet.

SIMPLE GEOLOGY LOG - ESEE DATABASE.GDT - 1/13/16 14:11 - \\10.1.1.9\TUSCALOOSA PROJECTS\2015\600115\055 SOUTHERN CO - EC GASTON\PHASE I - EC GASTON\EC GASTON GSA LOGS.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	HCL REACTION			COMMENTS
			Weak	Moderate	Strong	
5		<b>Well-graded Gravel with Silt (GW-GM)</b> - brownish yellow (10YR 6/8), red (2.5YR 4/8) and light gray (10YR 7/2) dry, medium dense, Gravel, sandy silt, small black mottles				SPT N=14bpf(@3.5ft.)
10		<b>Clayey Silty Sand (SC-SM)</b> - yellowish red (5YR 4/6) dry, medium dense, Clayey silt, small gravel, with black mottles				SPT N=25bpf(@8.5ft.)
15		<b>Clayey Silty Sand (SC-SM)</b> - yellow (10YR 7/6) and very pale brown (10YR 7/3) dry, medium dense, Clayey silt, tiny black mottles				SPT N=17bpf(@13.5ft.)
20		<b>Well-graded Gravel with Silt (GW-GM)</b> - yellowish brown (10YR 5/8) and red (10R 4/8) dry, medium dense, Sandy silt, small black mottles				SPT N=18bpf(@18.5ft.)
25		<b>Clayey Silty Sand (SC-SM)</b> - brownish yellow / dark yellowish orange (10YR 6/6) and strong brown (7.5YR 5/8) damp, loose, Clayey silt turning to sandy silt, black mottles				SPT N=10bpf(@23.5ft.)
30		<b>Clayey Sand (SC)</b> - yellowish brown (10YR 5/6) and dark yellowish brown (10YR 3/4) moist, Clayey sand				SPT N=51bpf(@28.5ft.)
35		<b>Limestone</b> - medium gray (N5), dark gray (N3) and medium light gray (N6) medium hard, not weathered, 4, Tiny calcite filled fractures, 4 natural				
		<b>Limestone</b> - grayish black (N2) and medium dark gray (N4) medium hard, not weathered, 6, Two layers of shale at 36.7', small calcite filled fractures. reacts with HCl				
40		<b>Limestone</b>				

(Continued Next Page)



# LOG OF TEST BORING

**SOUTHERN COMPANY SERVICES, INC.**  
**EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING**

**PROJECT** Plant Gaston Gypsum Storage Area

**LOCATION** EC Gaston Steam Plant

SIMPLE GEOLOGY LOG - ESEE DATABASE.GDT - 1/13/16 14:11 - \\10.1.1.9\TUSCALOOSA PROJECTS\2015\600115\055 SOUTHERN CO - EC GASTON\PHASE I - EC GASTON\EC GASTON GSA LOGS.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	HCL REACTION			COMMENTS
			Weak	Moderate	Strong	
43.0		- grayish black (N2), black (N1) and medium dark gray (N4) medium hard, not weathered, 6, Limestone turning to shale at 43.0', small calcite filled fracture <b>Limestone (Cont)</b>				
45		<b>Shale</b> - black (N1) soft, not weathered, Shale, fissle, tiny layers dolomitic limestone				
50		<b>Dolomitic Limestone</b> - medium dark gray (N4) and medium gray (N5) medium hard, not weathered, 48.5-48.7 clay layer, turning to dolomitic limestone to 49.3, fissle shale to 53.5, with few layers of dolomitic limestone				
55		<b>Dolomitic Limestone</b> - dark gray (N3) and medium light gray (N6) medium hard, not weathered, 53.5-54.2 dolomitic limestone, turns to shale at 54.2, clay layer at limestone and shale contact, small calcite filled fractures in limestone				
60		<b>Dolomitic Limestone</b> - dark gray (N3) medium hard, not weathered, 6, Calcite filled fractures, competent rock				
65		<b>Dolomitic Limestone</b> - grayish black (N2) soft, not weathered, 5, Calcite filled fractures, reacts with HCl				
70		<b>Dolomitic Limestone</b> - grayish black (N2) medium hard, slightly weathered, Small to medium calcite filled fractures, slight weathering at fractures				
75		<b>Dolomitic Limestone</b> - grayish black (N2) medium hard, not weathered, 5, Tiny calcite filled fractures, reacts with HCl				
80		<b>Dolomitic Limestone</b> - medium dark gray (N4) and medium light gray (N6) medium hard, not weathered, 4, Calcite filled fractures, calcite crystals at 82.5				
85		<b>Dolomitic Limestone</b> - dark gray (N3) and medium light gray (N6) medium hard, not weathered, 5, Calcite filled fractures, slickensides				

(Continued Next Page)



# LOG OF TEST BORING

**BORING GN-GSA-MW-1**  
PAGE 3 OF 4  
ES

**SOUTHERN COMPANY SERVICES, INC.**  
**EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING**

**PROJECT** Plant Gaston Gypsum Storage Area  
**LOCATION** EC Gaston Steam Plant

SIMPLE GEOLOGY LOG - ESEE DATABASE.GDT - 1/13/16 14:11 - \\10.1.1.9\TUSCALOOSA PROJECTS\2015\600115\055 SOUTHERN CO - EC GASTON\PHASE I - EC GASTON\EC GASTON GSA LOGS.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	HCL REACTION		COMMENTS
			Weak	Moderate Strong	
90		<b>Dolomitic Limestone</b> - dark gray (N3) and medium light gray (N6) medium hard, not weathered, 9, Some slickensides			
95		<b>Dolomitic Limestone</b> - dark gray (N3), medium light gray (N6) and medium dark gray (N4) medium hard, not weathered, 8, Dolomitic limestone, reacts with HCl			
100		<b>Dolomitic Limestone</b> - medium gray (N5) medium hard, not weathered, More fractures, vertical fracture from 98.5-99, calcite filled fractures			
105		<b>Dolomitic Limestone</b> - medium dark gray (N4) and dark gray (N3) medium hard, not weathered, Calcite filled fractures, slickensides			
110		<b>Dolomitic Limestone</b> - dark gray (N3) and medium dark gray (N4) medium hard, not weathered, Vertical fracture at 111 with calcite crystals, highly fractured from 111-113.5, slickensides, calcite filled fractures			
115		<b>Dolomitic Limestone</b> - dark gray (N3) and medium gray (N5) medium hard, not weathered, Large vertical fracture with calcite crystals throughout			
120		<b>Dolomitic Limestone</b> - medium gray (N5) medium hard, not weathered, Calcite filled vertical fracture measuring 1mm thick			
125		<b>Dolomitic Limestone</b> - medium gray (N5) and medium dark gray (N4) medium hard, not weathered, Small calcite filled fractures throughout			
130		<b>Dolomitic Limestone</b> - medium gray (N5) medium hard, not weathered, 3, Small calcite filled fractures throughout			
135		<b>Dolomitic Limestone</b> - dark gray (N3) and medium dark gray (N4) medium hard, not weathered, 5, Small calcite filled fractures throughout			

(Continued Next Page)





# LOG OF TEST BORING

SOUTHERN COMPANY SERVICES, INC.  
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gaston Gypsum Storage Area  
LOCATION EC Gaston Steam Plant

SIMPLE GEOLOGY LOG - ESEE DATABASE.GDT - 1/13/16 14:11 - \\10.1.1.9\TUSCALOOSA PROJECTS\2015\600115\055 SOUTHERN CO - EC GASTON\PHASE I - EC GASTON\EC GASTON GSA LOGS.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	HCL REACTION Weak Moderate Strong	COMMENTS
		Dolomitic Limestone (Cont')		
140		Dolomitic Limestone - dark gray (N3) and medium dark gray (N4) medium hard, not weathered, 5		
145		Dolomitic Limestone - dark gray (N3) medium hard, not weathered, 3		
150		Dolomitic Limestone - dark gray (N3) medium hard, not weathered, Small vertical calcite fracture from 151.5-152.5		
155		Dolomitic Limestone - medium dark gray (N4) and dark gray (N3) medium hard, not weathered, Medium vertical calcite fracture with calcite crystals from 157.5-158.5		
160		Dolomitic Limestone - medium dark gray (N4) and dark gray (N3) medium hard, not weathered, Vertical calcite filled fracture to 163		
165		Dolomitic Limestone - medium dark gray (N4) and dark gray (N3) medium hard, not weathered, 3		
170		Bottom of borehole at 168.5 feet.		
175				
180				



# RECORD OF WELL CONSTRUCTION

**WELL: GN-GSA-MW-1**  
PAGE 1 OF 4  
ES

**SOUTHERN COMPANY SERVICES, INC.**  
**EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING**

**PROJECT** Plant Gaston Gypsum Storage Area  
**LOCATION** EC Gaston Steam Plant

**DATE STARTED** 11/4/2015    **COMPLETED** 11/5/2015    **SURF. ELEV.** Not Surveyed    **COORDINATES:** \_\_\_\_\_  
**CONTRACTOR** TTL, Inc.    **EQUIPMENT** \_\_\_\_\_    **METHOD** Hollow Stem Auger; HQ Rock Core  
**DRILLED BY** D. Campbell    **LOGGED BY** J. Williams    **CHECKED BY** C. Sellers    **ANGLE** \_\_\_\_\_    **BEARING** \_\_\_\_\_  
**BORING DEPTH** 168.5 ft.    **GROUND WATER DEPTH: DURING** \_\_\_\_\_    **COMP.** \_\_\_\_\_    **DELAYED** \_\_\_\_\_  
**NOTES** Begin Engineering Log at 30.5 ft. Well installed. Refer to well data sheet.

2012 WELL CONSTRUCTION RECORD - ESEE DATABASE.GDT - 1/12/16 14:13 - \\10.1.1.9\TUSCALOOSA PROJECTS\2015\600115055 SOUTHERN CO - EC GASTON\PHASE I - EC GASTON\EC GASTON LOGS.GPJ

BOREHOLE DATA	WELL DATA	COMMENTS
<p style="text-align: center;">DEPTH (ft)</p> <p style="text-align: center;">Strata</p>	<p style="text-align: right;">(DEPTH)</p> <p style="text-align: right;">(0.5)</p> <p>Annular Fill:</p> <p>Well:</p>	

(Continued Next Page)



# RECORD OF WELL CONSTRUCTION

WELL: GN-GSA-MW-1  
PAGE 2 OF 4  
ES

SOUTHERN COMPANY SERVICES, INC.  
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gaston Gypsum Storage Area

LOCATION EC Gaston Steam Plant

2012 WELL CONSTRUCTION RECORD - ESEE DATABASE.GDT - 1/12/16 14:13 - \\10.1.1.9\TUSCALOOSA PROJECTS\2015\600115\055 SOUTHERN CO - EC GASTON\PHASE I - EC GASTON\EC GASTON GSA LOGS.GPJ

BOREHOLE DATA	WELL DATA		COMMENTS
Strata	DEPTH (ft)	(CONTINUED)	(DEPTH)
	45 50 55 60 65 70 75 80 85	<p data-bbox="435 1234 553 1262">Annular Fill:</p>	

(Continued Next Page)



# RECORD OF WELL CONSTRUCTION

**WELL: GN-GSA-MW-1**  
PAGE 3 OF 4  
ES

**SOUTHERN COMPANY SERVICES, INC.**  
**EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING**

**PROJECT** Plant Gaston Gypsum Storage Area

**LOCATION** EC Gaston Steam Plant

2012 WELL CONSTRUCTION RECORD - ESEE DATABASE.GDT - 1/12/16 14:13 - \\10.1.1.9\TUSCALOOSA PROJECTS\2015\600115\055 SOUTHERN CO - EC GASTON\PHASE I - EC GASTON\IEC GASTON GSA LOGS.GPJ

BOREHOLE DATA	DEPTH (ft)	WELL DATA	COMMENTS
Strata	(CONTINUED)	(DEPTH)	
90	95	100	105
110	115	120	125
130	135		
		Annular Fill:	
		← Annular Seal:	(106.0)
		← Filter:	(110.0)
		← Screen: 10 ft.	(113.0)
		← Sump: 5.00 ft.	(123.0)
		Backfill:	(128.0)

(Continued Next Page)



# RECORD OF WELL CONSTRUCTION

WELL: GN-GSA-MW-1  
PAGE 4 OF 4  
ES

SOUTHERN COMPANY SERVICES, INC.  
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gaston Gypsum Storage Area  
LOCATION EC Gaston Steam Plant

2012 WELL CONSTRUCTION RECORD - ESEE DATABASE.GDT - 1/12/16 14:13 - \\10.1.1.9\TUSCALOOSA PROJECTS\2015\600115\055 SOUTHERN CO - EC GASTON\PHASE I - EC GASTON\EC GASTON GSA LOGS.GPJ

BOREHOLE DATA	WELL DATA		COMMENTS
Strata	DEPTH (ft)	(CONTINUED)	(DEPTH)
	140 145 150 155 160 165	<p data-bbox="440 982 516 1003">Backfill:</p>	



geotechnical • analytical • materials • environmental

CLIENT:

PROJECT:

APCO Plant Gaston

LOG OF BORING

GN-GSA-MW-1

Page 1 of

PROJECT NUMBER	000115055	GEOLOGIST	JLW
LOCATION	GSA	DATE(S) DRILLED	11/4/15
DRILLING COMPANY	TTL, INC.	CASING DIA./TYPE	
DRILLER	D. Campbell	SCREEN SLOT/TYPE	
DRILLING METHOD		FILTER PACK TYPE	
REMARKS		TOP OF CASING	
		GROUND ELEVATION	
		DEPTH TO WATER	
		WATER ELEVATION	

DEPTH (feet)	U.S.C.S.	SAMPLE			LITHOLOGIC DESCRIPTION	WATER LEVEL & DATE	WELL DIAGRAM
		RECOVERY (feet)	EXTENT	PID (ppm)			
3.5					(9-6-8) N=14 gravel; (10YR 4/8) w/ (2.5YR 4/8) and (10YR 7/2); sandy silt; small bl. mottles; dry		
5.0							
8.5					(7-8-17) N=25 (5YR 4/6); clayey silt; small gravel; with black mottles; dry		
10							
13.5					(5-7-10) N=17 (10YR 7/6) with (10YR 7/3); clayey silt; tiny black mottles; dry		
15							
18.5					(5-7-11) N=18 (10YR 5/8) w/ some (10R 4/8) red; sandy silt; small black mottles; dry		
20							
23.5					(4-5-5) N=10 (10YR 6/6) w/ some (7.5YR 5/8); black clayey silt turning to sandy silt; mottles damp		
25							
28.5					(1-1-50/5) N=REF (10YR 5/6) with some (10YR 3/4); clayey sand; moist		
30					Auger Refusal at 30.5		
30.5							
33.5		2.8 3.0			RQD=1.1; med gray (N5) w/ dark gray (N3) and some med. lt gray (N6); tiny calcite filled frac.; limestone; 4 nat. frac.		

C:\PROGRAMS\GINT\PROJECTS\STAR GPJ 10/8/99 Report FIELD WELL LOG Template:TILEWV.GDT

33.5 RQD=100%; grayish black (N2) and med. dark gray (N4) •  
 5.0/5.0 mod hard; limestone; reacts w/HCl; Two small layers of  
 38.5 shale at 34.7 ; small calcite filled fractures.  
 0 nat. fractures

RQD=3.2 ; grayish black (N2) with black (N1) and •  
 some med. dark gray (N4); limestone turning to shale at 43.0;  
 Small calcite filled frac.; mod. hard

43.5 0 nat. fractures until shale; highly frac. from 43 to 43.5  
 RQD=0 ; black (N1); shale; fissile; soft to v. soft •  
 With tiny layers of dolomitic limestone.

48.5 48.5-48.7 - Gray clay layer; turning to dolomitic •  
 limestone to 49.3; black, fissile shale to 53.5 with  
 few layers of med. gray (N5) dolomitic limestone (reacts w/HCl)  
 shale - soft to v. soft ; dl - mod. hard. RQD=0.5 (DL)

53.5 RQD=1.2'; 53.5-54.2 → dolomitic limestone; dark gray •  
 with some med lt gray; turns to shale at 54.2  
 3.9/5.0 soft to v. soft; clay layer at limestone & shale contact.  
 5.0 Small calcite filled frac. in limestone.

58.5 RQD=3.9; dark gray dolomitic limestone; mod hard to •  
 soft; Calcite filled frac.; competent rock  
 5.0/5.0 reacts w/HCl

63.5 0 natural fractures  
 4.0/5.0 RQD=4.0; gray black (N2); dolomitic limestone; •  
 mod. hard to soft; reacts with HCl;  
 Calcite filled frac; 5 natural fractures.

68.5 RQD=4.2 ; grayish black (N2) dolomitic limestone; •  
 5.0/5.0 soft to mod. hard; reacts w/HCl; small to med calcite  
 filled fractures; slight weathering at frac.

73.5 RQD=100%; grayish black (N2); dolomitic limestone; reacts •  
 with HCl; soft to mod hard; tiny calcite filled  
 fractures; 5 natural fractures

78.5



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CLIENT:

PROJECT:

APCO Plant Gaston

LOG OF BORING

GSAMW-1

Page 03 of

PROJECT NUMBER	U0015055	GEOLOGIST	JLW
LOCATION		DATE(S) DRILLED	11/4/15
DRILLING COMPANY	TTL	CASING DIA./TYPE	
DRILLER	D. Campbell	SCREEN SLOT/TYPE	
DRILLING METHOD		FILTER PACK TYPE	
REMARKS		TOP OF CASING	
		GROUND ELEVATION	
		DEPTH TO WATER	
		WATER ELEVATION	

DEPTH (feet)	U.S.C.S.	SAMPLE			LITHOLOGIC DESCRIPTION	WATER LEVEL & DATE	WELL DIAGRAM
		RECOVERY (feet)	EXTENT	PIID (ppm)			
78.5		5.0 5.0			RQD=100%; dolomitic limestone; med. dark gray (N4) w/ med. lt. gray (N6); reacts w/ HCl; mod hard; calcite filled frac.; calcite (crs at 82.5; 4 nat frac.		
83.5		5.0 5.0			RQD=100%; dolomitic limestone; dark gray (N3) with med lt gray (N6); reacts w/ HCl; mod. hard; calcite; slickensides filled fractures; 5 nat. frac.		
88.5		5.0			RQD=4.5'; dolomitic limestone; dark gray (N3) with med. lt. gray (N6); mod. hard; reacts w/ HCl; some slickensides 1 natural fractures		
93.5		5.0			RQD=100%; dolomitic limestone; dark gray (N3); with med dark gray and med. lt. gray (N6); reacts w/ HCl; mod. hard; 0 total fractures.		
98.5		5.0			RQD=2.9; dolomitic limestone; med. gray (N5); mod. hard; reacts with HCl; more fract.; vert. frac from 98.5 - 99; calcite filled frac;		
103.5		4.9 5.0			RQD=3.9; med. dark gray (N4) w/ Some dark gray (N3); dolomitic limestone; reacts with HCl; mod. hard; calcite filled frac.; slickensides		
108.5		5.0			RQD=2.2; SAA to 111; dark gray (N3); dolomitic limestone; vert. frac. at 111 w/ calcite crystals; highly frac. from 111 to 113.5; slickensides; calcite filled frac.		
113.5							

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113.5 RQD = 0  
 113.5 - 114 = dark gray (N3); dolomitic limestone; mod. hard;  
 114 - 118.5 → med gray (N5) w/ alternating dark gray (N3) layers  
 (0.1 in thick); dolomitic limestone; mod. hard;  
 large vertical calcite fract w/ calcite crystals throughout

H<sub>2</sub>O

118.5 RQD = 100%; med. gray (N5); dolomitic limestone;  
 reacts w/ HCl; mod. hard; ~~some~~ 1 mm calcite filled  
 vertical fracture.

123.5 RQD = 2.0; med gray (N5); dolomitic limestone;  
 vertical frac; mod. hard; reacts w/ HCl

128.5 Small calcite filled fractures.

RQD = 100%; med gray (N5) w/ some med. dark gray (N4);  
 dolomitic limestone; mod. hard; reacts w/ HCl;  
 small calcite filled fractures.

133.5 3 nat fractures

RQD = 100%; dark gray (N3) with med dark gray (N4);  
 calcite filled fractures; dolomitic limestone;  
 mod. hard; reacts w/ HCl.

138.5 5 total fractures

RQD = 4.8; dark gray (N3) with med. dark gray (N4);  
 dolomitic limestone; reacts with HCl; mod. hard.

143.5 5 natural fractures

RQD = 100%; dark gray (N3); mod hard; reacts  
 with HCl; dolomitic limestone

148.5 3 natural frac.

RQD = 2.7; SFA; dolomitic limestone

153.5 Small vertical calcite fracture from  
151.5 to ~~152~~ 152.5

RQD = 3.0; med. dark gray (N4); dolomitic limestone;  
 reacts w/ HCl; mod. hard; w/ some dark gray (N3)

med. vertical calcite frac. w/ calcite crystals  
 from 157.5 to 158.5

158.5



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CLIENT:

PROJECT:

APCO Plant Gaston

LOG OF BORING  
GSA- MW-1

Page 5 of 5

PROJECT NUMBER 000116055  
 LOCATION \_\_\_\_\_  
 DRILLING COMPANY TTL, Inc.  
 DRILLER P. Campbell  
 DRILLING METHOD \_\_\_\_\_  
 REMARKS \_\_\_\_\_

GEOLOGIST JLW  
 DATE(S) DRILLED 11/4/15 - 11/5/15  
 CASING DIA./TYPE \_\_\_\_\_  
 SCREEN SLOT/TYPE \_\_\_\_\_  
 FILTER PACK TYPE \_\_\_\_\_  
 TOP OF CASING \_\_\_\_\_  
 GROUND ELEVATION \_\_\_\_\_  
 DEPTH TO WATER \_\_\_\_\_  
 WATER ELEVATION \_\_\_\_\_

DEPTH (feet)	U.S.C.S.	SAMPLE			LITHOLOGIC DESCRIPTION	WATER LEVEL & DATE	WELL DIAGRAM
		RECOVERY (feet)	EXTENT	PID (ppm)			
103.5					RQD=2.9; med. dark gray (N4) w/ dark gray (N3); mod. hard; reacts w/ HCl; dol. vertical calcite filled fracture to 103.0		
108.5					RQD=4.0; med dark gray (N4); dark gray (N3); mod. hard; reacts with HCl; 3 nat. frac.		
					Bent fill = 109-128 Sand fill = 128-123 Screen = 123-113 Sand = 110 bent = 100 Cap = 123.4		



# LOG OF TEST BORING AND WELL INSTALLATION

**BORING GP2-4**  
PAGE 1 OF 1

SOUTHERN COMPANY SERVICES, INC.  
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Gypsum Storage Phase 2  
LOCATION Plant Gaston

DATE STARTED 10/15/2014 COMPLETED 10/20/2014 SURF. ELEV. 414.5 COORDINATES: N:1,185,834.90 E:2,287,261.03

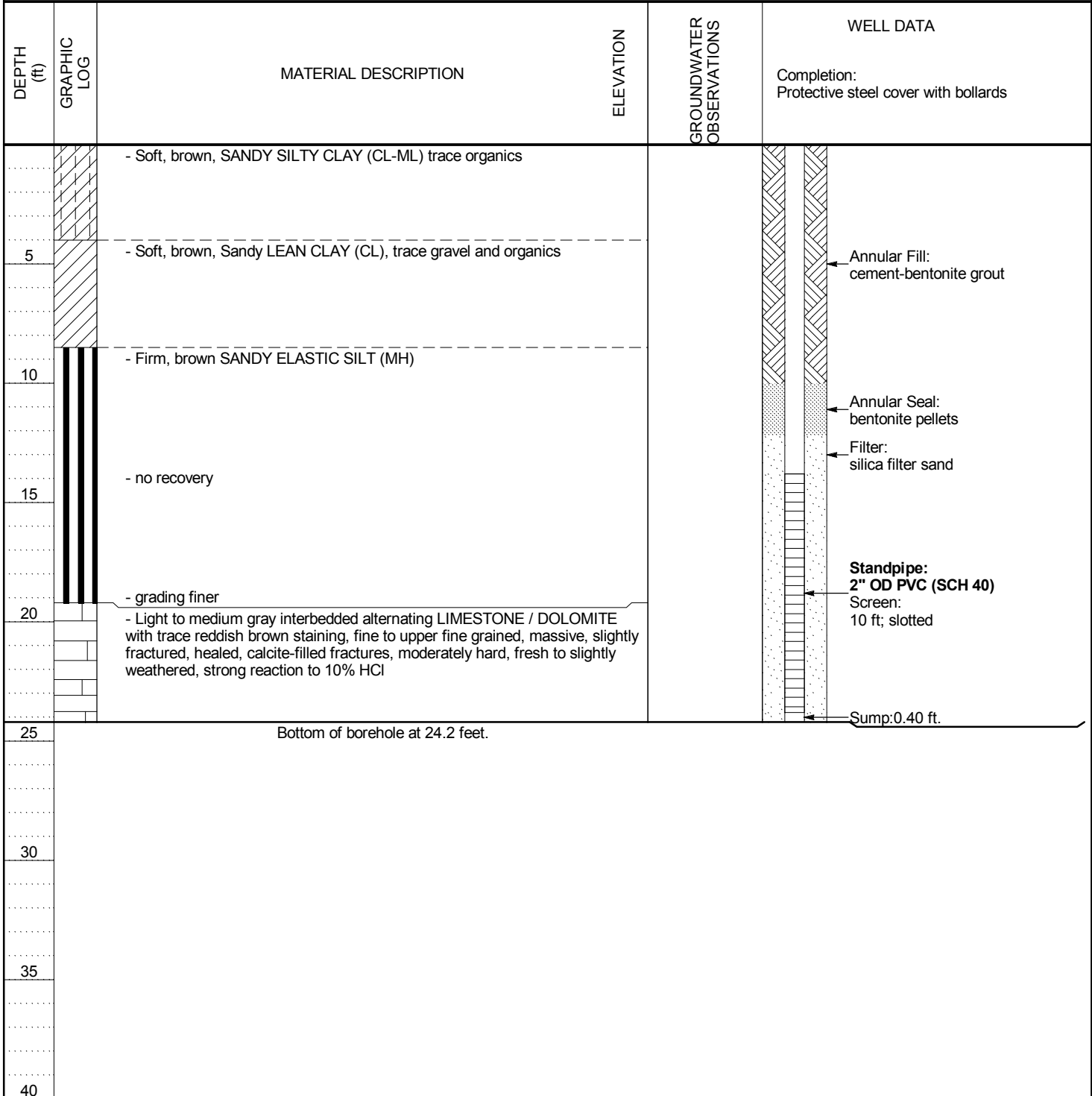
CONTRACTOR \_\_\_\_\_ EQUIPMENT \_\_\_\_\_ METHOD Hollow Stem Auger; HQ Rock Core

DRILLED BY \_\_\_\_\_ LOGGED BY \_\_\_\_\_ CHECKED BY \_\_\_\_\_ ANGLE \_\_\_\_\_ BEARING \_\_\_\_\_

BORING DEPTH 24.2 ft. GROUND WATER DEPTH: DURING \_\_\_\_\_ COMP. \_\_\_\_\_ DELAYED \_\_\_\_\_

NOTES \_\_\_\_\_

GEOTECH WITH WELL LOG - ESEE DATABASE.GDT - 6/3/15 14:00 - T:\ESEE MAJOR PROJECTS\GASTON\GASTON 2014\ES2378 GYPSUM STORAGE PHASE 2\GYPJ



# Appendix C

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

# ***Analytical Report***



**Sample Group :** WMWGASG\_1362

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

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

**Attention :** Dustin Brooks & Greg Dyer

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

April 27, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on April 14, 2022. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114  
Issued By: State of Florida, Department of Health  
Expiration: June 30, 2022

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

Sincerely,

Quality Control: **Laura Midkiff**  
Digitally signed by Laura Midkiff  
DN: cn=Laura Midkiff, o=Alabama Power  
Company, ou=Environmental Affairs,  
email=lmidkif@southernco.com, c=US  
Date: 2022.04.27 09:49:06 -05'00'

Supervision: **T Durant Maske**  
Digitally signed by T Durant Maske  
DN: cn=T Durant Maske, gn=T Durant Maske, c=US  
United States, l=US, United States  
e=tmaske@southernco.com  
Reason: I am approving this document  
Location:  
Date: 2022-04-27 10:21:05-00



### 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.



Total Metals ICP

Gaston Gypsum

WMWGASG\_1362

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07381	724250	WMWGASG_1362
BC07382	724250	WMWGASG_1362
BC07383	724250	WMWGASG_1362
BC07384	724250	WMWGASG_1362

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

## Matrix Specific Quality Control Procedures:

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

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

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC07381	Calcium	10.15
BC07382	Calcium	10.15

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



Total Metals ICPMS

Gaston Gypsum

WMWGASG\_1362

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07381	724173	WMWGASG_1362
BC07382	724173	WMWGASG_1362
BC07383	724173	WMWGASG_1362
BC07384	724173	WMWGASG_1362

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

#### General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

### Matrix Specific Quality Control Procedures:

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

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

Total Dissolved Solids

Gaston Gypsum

WMWGASG\_1362

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07381	723773	WMWGASG_1362
BC07382	723773	WMWGASG_1362
BC07383	723773	WMWGASG_1362
BC07384	723773	WMWGASG_1362

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

#### General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was  $\leq 10\%$ .
- 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  $< 2.5\text{mg}$  had the maximum volume of 150mL filtered. Affected samples are as follows:
  - BC07383
  - BC07384

Anions

Gaston Gypsum

WMWGASG\_1362

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC07381	723765, 723768, & 723828	WMWGASG_1362
BC07382	723765, 723768, & 723828	WMWGASG_1362
BC07383	723765, 723768, & 723828	WMWGASG_1362
BC07384	723765, 723768, & 723828	WMWGASG_1362

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) was analyzed, and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below 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 and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
  - A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.
7. All samples were analyzed without dilution.

# Certificate Of Analysis

**Description:** Gaston Gypsum -GS2-4

**Location Code:** WMWGASG  
**Collected:** 4/12/22 09:55  
**Customer ID:**  
**Submittal Date:** 4/14/22 12:04

**Laboratory ID Number:** BC07381

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 10:07	4/22/22 14:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 10:07	4/22/22 15:14		10.15	91.0	mg/L	0.70035	4.06	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>				
* Barium, Total	4/18/22 10:14	4/19/22 14:44		1.015	0.0781	mg/L	0.000102	0.000203	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/18/22 10:48	4/19/22 13:20		1	322	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:33	4/15/22 09:33		1	4.93	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 14:36	4/15/22 14:36		1	0.0798	mg/L	0.06	0.125	J
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:24	4/19/22 11:24		1	23.2	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	4/12/22 09:52	4/12/22 09:52			550.79	uS/cm			FA
pH	4/12/22 09:52	4/12/22 09:52			6.29	SU			FA
Temperature	4/12/22 09:52	4/12/22 09:52			18.98	C			FA
Turbidity	4/12/22 09:52	4/12/22 09:52			3.19	NTU			FA
Sulfide	4/12/22 09:52	4/12/22 09:52			0	mg/L			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 09:55  
**Customer ID:**  
**Delivery Date:** 4/14/22 12:04

**Description:** Gaston Gypsum -GS2-4

**Laboratory ID Number:** BC07381

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07384	Barium, Total	mg/L	-0.0000115	0.000200	0.100	0.0926	0.0979	0.102	0.0850 to 0.115	92.6	70.0 to 130	5.56	20.0
BC07384	Boron, Total	mg/L	0.00425	0.0650	1.00	1.01	1.00	1.01	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC07384	Calcium, Total	mg/L	0.00528	0.152	5.00	5.31	5.25	5.26	4.25 to 5.75	106	70.0 to 130	1.14	20.0
BC07384	Chloride	mg/L	0.0306	1.00	10.0	9.62	9.89	9.84	9.00 to 11.0	96.2	80.0 to 120	2.77	20.0
BC07384	Fluoride	mg/L	0.022	0.125	2.50	2.54	2.50	2.58	2.25 to 2.75	102	80.0 to 120	1.59	20.0
BC07384	Sulfate	mg/L	0.137	2.0	20.0	20.5	20.4	19.9	18.0 to 22.0	102	80.0 to 120	0.489	20.0

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 09:55  
**Customer ID:**  
**Delivery Date:** 4/14/22 12:04

**Description:** Gaston Gypsum -GS2-4

**Laboratory ID Number:** BC07381

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Limit
BC07381	Solids, Dissolved	mg/L	0.0000	25.0			324	49.0	40.0 to 60.0			0.619	10.0

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**Comments:**



# Certificate Of Analysis

**Description:** Gaston Gypsum -GS2-4 DUP

**Location Code:** WMWGASG  
**Collected:** 4/12/22 09:55  
**Customer ID:**  
**Submittal Date:** 4/14/22 12:04

**Laboratory ID Number:** BC07382

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 10:07	4/22/22 14:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 10:07	4/22/22 15:17		10.15	90.7	mg/L	0.70035	4.06	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>				
* Barium, Total	4/18/22 10:14	4/19/22 14:47		1.015	0.0789	mg/L	0.000102	0.000203	
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/18/22 10:48	4/19/22 13:20		1	322	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:34	4/15/22 09:34		1	4.92	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 14:37	4/15/22 14:37		1	0.0821	mg/L	0.06	0.125	J
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:25	4/19/22 11:25		1	23.5	mg/L	0.6	2	
<b>Analytical Method: Field Measurements</b>		<b>Analyst: DKG</b>							
Conductivity	4/12/22 09:52	4/12/22 09:52			550.79	uS/cm			FA
pH	4/12/22 09:52	4/12/22 09:52			6.29	SU			FA
Temperature	4/12/22 09:52	4/12/22 09:52			18.98	C			FA
Turbidity	4/12/22 09:52	4/12/22 09:52			3.19	NTU			FA
Sulfide	4/12/22 09:52	4/12/22 09:52			0	mg/L			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 09:55  
**Customer ID:**  
**Delivery Date:** 4/14/22 12:04

**Description:** Gaston Gypsum -GS2-4 DUP

**Laboratory ID Number:** BC07382

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07384	Barium, Total	mg/L	-0.0000115	0.000200	0.100	0.0926	0.0979	0.102	0.0850 to 0.115	92.6	70.0 to 130	5.56	20.0
BC07384	Boron, Total	mg/L	0.00425	0.0650	1.00	1.01	1.00	1.01	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC07384	Calcium, Total	mg/L	0.00528	0.152	5.00	5.31	5.25	5.26	4.25 to 5.75	106	70.0 to 130	1.14	20.0
BC07384	Chloride	mg/L	0.0306	1.00	10.0	9.62	9.89	9.84	9.00 to 11.0	96.2	80.0 to 120	2.77	20.0
BC07384	Fluoride	mg/L	0.022	0.125	2.50	2.54	2.50	2.58	2.25 to 2.75	102	80.0 to 120	1.59	20.0
BC07384	Sulfate	mg/L	0.137	2.0	20.0	20.5	20.4	19.9	18.0 to 22.0	102	80.0 to 120	0.489	20.0

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGASG  
**Sample Date:** 4/12/22 09:55  
**Customer ID:**  
**Delivery Date:** 4/14/22 12:04

**Description:** Gaston Gypsum -GS2-4 DUP

**Laboratory ID Number:** BC07382

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit Limit	Prec Prec	Limit Limit
BC07381	Solids, Dissolved	mg/L	0.0000	25.0			324	49.0	40.0 to 60.0			0.619	10.0

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**Comments:**

# Certificate Of Analysis

**Description:** Gaston Gypsum Field Blank-1

**Location Code:** WMWGASGFB  
**Collected:** 4/12/22 10:20  
**Customer ID:**  
**Submittal Date:** 4/14/22 12:04

**Laboratory ID Number:** BC07383

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>			<b>Preparation Method: EPA 1638</b>				
* Boron, Total	4/22/22 10:07	4/22/22 14:59		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 10:07	4/22/22 14:59		1.015	Not Detected	mg/L	0.070035	0.406	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>				
* Barium, Total	4/18/22 10:14	4/19/22 14:51		1.015	Not Detected	mg/L	0.000102	0.000203	U
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/18/22 10:48	4/19/22 13:20		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:35	4/15/22 09:35		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 14:38	4/15/22 14:38		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:26	4/19/22 11:26		1	Not Detected	mg/L	0.6	2	U

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 4/12/22 10:20

**Customer ID:**

**Delivery Date:** 4/14/22 12:04

**Description:** Gaston Gypsum Field Blank-1

**Laboratory ID Number:** BC07383

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07384	Barium, Total	mg/L	-0.0000115	0.000200	0.100	0.0926	0.0979	0.102	0.0850 to 0.115	92.6	70.0 to 130	5.56	20.0
BC07384	Boron, Total	mg/L	0.00425	0.0650	1.00	1.01	1.00	1.01	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC07384	Calcium, Total	mg/L	0.00528	0.152	5.00	5.31	5.25	5.26	4.25 to 5.75	106	70.0 to 130	1.14	20.0
BC07384	Chloride	mg/L	0.0306	1.00	10.0	9.62	9.89	9.84	9.00 to 11.0	96.2	80.0 to 120	2.77	20.0
BC07384	Fluoride	mg/L	0.022	0.125	2.50	2.54	2.50	2.58	2.25 to 2.75	102	80.0 to 120	1.59	20.0
BC07384	Sulfate	mg/L	0.137	2.0	20.0	20.5	20.4	19.9	18.0 to 22.0	102	80.0 to 120	0.489	20.0

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGASGFB

**Sample Date:** 4/12/22 10:20

**Customer ID:**

**Delivery Date:** 4/14/22 12:04

**Description:** Gaston Gypsum Field Blank-1

**Laboratory ID Number:** BC07383

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Limit
BC07381	Solids, Dissolved	mg/L	0.0000	25.0			324	49.0	40.0 to 60.0			0.619	10.0

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**Comments:**

# Certificate Of Analysis

**Description:** Gaston Gypsum Equipment Blank-1

**Location Code:** WMWGASGEB  
**Collected:** 4/12/22 10:25  
**Customer ID:**  
**Submittal Date:** 4/14/22 12:04

**Laboratory ID Number:** BC07384

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: ABB</b>		<b>Preparation Method: EPA 1638</b>					
* Boron, Total	4/22/22 10:07	4/22/22 15:03		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	4/22/22 10:07	4/22/22 15:03		1.015	Not Detected	mg/L	0.070035	0.406	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>					
* Barium, Total	4/18/22 10:14	4/19/22 14:54		1.015	Not Detected	mg/L	0.000102	0.000203	U
<b>Analytical Method: SM 2540C</b>		<b>Analyst: CNJ</b>							
* Solids, Dissolved	4/18/22 10:48	4/19/22 13:20		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	4/15/22 09:36	4/15/22 09:36		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	4/15/22 14:39	4/15/22 14:39		1	Not Detected	mg/L	0.06	0.125	U
<b>Analytical Method: SM4500SO4 E 2011</b>		<b>Analyst: JCC</b>							
* Sulfate	4/19/22 11:27	4/19/22 11:27		1	Not Detected	mg/L	0.6	2	U

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGASGEB

**Sample Date:** 4/12/22 10:25

**Customer ID:**

**Delivery Date:** 4/14/22 12:04

**Description:** Gaston Gypsum Equipment Blank-1

**Laboratory ID Number:** BC07384

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC07384	Barium, Total	mg/L	-0.0000115	0.000200	0.100	0.0926	0.0979	0.102	0.0850 to 0.115	92.6	70.0 to 130	5.56	20.0
BC07384	Boron, Total	mg/L	0.00425	0.0650	1.00	1.01	1.00	1.01	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC07384	Calcium, Total	mg/L	0.00528	0.152	5.00	5.31	5.25	5.26	4.25 to 5.75	106	70.0 to 130	1.14	20.0
BC07384	Chloride	mg/L	0.0306	1.00	10.0	9.62	9.89	9.84	9.00 to 11.0	96.2	80.0 to 120	2.77	20.0
BC07384	Fluoride	mg/L	0.022	0.125	2.50	2.54	2.50	2.58	2.25 to 2.75	102	80.0 to 120	1.59	20.0
BC07384	Sulfate	mg/L	0.137	2.0	20.0	20.5	20.4	19.9	18.0 to 22.0	102	80.0 to 120	0.489	20.0

**Comments:**



## Batch QC Summary

**Customer Account:** WMWGASGEB

**Sample Date:** 4/12/22 10:25

**Customer ID:**

**Delivery Date:** 4/14/22 12:04

**Description:** Gaston Gypsum Equipment Blank-1

**Laboratory ID Number:** BC07384

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Limit
BC07381	Solids, Dissolved	mg/L	0.0000	25.0			324	49.0	40.0 to 60.0			0.619	10.0

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**Comments:**

# Definitions

**Project Number:** WMWGASG\_1362

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

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
U	Compound was analyzed, but not detected.

