
**2018 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE
ACTION REPORT**

**ALABAMA POWER COMPANY
PLANT GASTON GYPSUM POND**



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ABBREVIATIONS

AL	Alabama
APC	Alabama Power Company
APCEL	APC Environmental Laboratory
ASD	Alternate Source Demonstration
ASTM	Alabama Power Company Environmental Laboratory
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
m	meter
mg/L	milligram per liter
MSL	mean sea level
MW-	denotes "Monitoring Well"
NELAP	National Environmental Laboratory Accreditation Program
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
pCi/L	picocuries per liter
PE	Professional Engineer
PG	Professional Geologist
PL	prediction limits
PQL	practical quantitation limit
PVC	polymerizing vinyl chloride
QA/QC	quality assurance/quality control
RL	reporting limit
RPD	relative percent difference
SM	Standard Method(s)
SSI	statistically significant increase
SSL	statistically significant level
TAL	Test America, Inc.
TOC	top of casing
TDS	total dissolved solids
USGS	United States Geological Survey

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency's (EPA) coal combustion residual (CCR) rule (40 C.F.R. Part 257, Subpart D) and the State of Alabama's ADEM Admin. Code Chapter 335-13-15, this 2018 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document the 2018 initial assessment and two semi-annual 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). Initial assessment monitoring, semi-annual monitoring, and associated reporting for Plant Gaston Gypsum Pond is performed in accordance with the monitoring requirements §257.90 through §257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

2.0 SITE LOCATION AND DESCRIPTION

Alabama Power Company's Plant E.C. Gaston Steam Plant (Plant Gaston) is in Shelby County, Alabama. The physical address is 31972 Alabama Highway 25, Wilsonville, AL 35186. Plant Gaston lies in Section 1, Township 21 South, Range 1 East, Sections 5 and 6, Township 21 South, Range 2 East, and Sections 31 and 32, Township 20 South, Range 2 East data are based on visual inspection of USGS topographic quadrangle maps and GIS maps (USGS, 1980, 1982a, 1982b, 1983).

The Gypsum Pond is located south-southwest 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.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

3.1 Physical Setting

Plant Gaston's topography is characterized by a flat valley adjacent to the Coosa river. 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 20 miles (Sapp and Emplaincourt, 1975). Local topography is characterized by moderate relief with elevations ranging from approximately 395 MSL along the eastern plant boundary to approximately 530 feet MSL at a hilltop in the southwestern portion of the plant.

3.2 Geology and Hydrogeology

Plant Gaston is located in the Coosa Valley district of the Valley and Ridge Physiographic Province of central Alabama, which is characterized by moderate relief with elevations ranging from approximately 395 feet MSL along the eastern plant boundary to approximately 530 feet MSL at a hilltop in the southwestern portion of the plant. The geologic units on the property have been folded and faulted at various intervals, and several faults consisting of low-to-high angle thrust faults and some normal faults are present. Fault sets trend obliquely to one another in the northeastern portion of the plant, resulting in a series of imbricate thrust slices of Fort Payne chert, Parkwood and Floyd shales, and Newala limestone (Frings, 1980).

The plant is on a portion of the Valley and Ridge province known as the Coosa deformed belt, which is a long, sinuous, structurally complex zone that can be subdivided laterally into three segments by two lateral offsets. (GSA, 2010b) The Coosa deformed belt is situated on the Yellowleaf thrust sheet, which is a

shallowly detached structural complex with small-scale, commonly isoclinal parasitic folding (McIntyre, *et al.*, 2010). Two lateral offsets subdivide the belt, the Harpersville offset and the Reeds Mill offset. The Harpersville offset is located on the southwest end of the Coosa deformed belt and lies just northeast of the plant. **Figure 2, Site Geologic Map**, illustrates the surface geology at the site and neighboring areas.

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

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

3.3 Uppermost Aquifer

The uppermost aquifer beneath the site is the Valley and Ridge aquifer system. At the site, monitoring wells are generally screened in overburden material, the overburden-top of rock interface, and upper portions of the Newala Limestone. The first zone of saturation most commonly pertains to coarse sediments near the top of rock interface. Depth to the top of the uppermost aquifer is generally on the order of 30 to 40 feet below ground surface (BGS), but can vary at locations where overburden moisture is not present and weathered or fractured rock yields little groundwater for pumping. Groundwater elevations from overburden and rock screened wells are relatively uniform, indicating unconfined conditions.

The Valley and Ridge aquifer system, found in the Coosa, Cahaba, Birmingham-Big Canoe, and Murphrees Valleys, includes the Weisner Formation; Shady Dolomite; Conasauga Formation; Copper Ridge and

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Chepultepec Dolomites; as well as the Longview, Newala, Lenoir, and Little Oak Limestones. In some areas, the Knox Group includes Copper Ridge, Chepultepec, Longview, and Newala united as one group. This aquifer system includes the Ketona, Brierfield, and Bibb Dolomites in Shelby County. Other rock units of Cambrian to Devonian age are included within the Valley and Ridge aquifer system, due to the fact that they do not form effective barriers to ground water movement among permeable units of the system. However, these other units are not significant sources of ground water (Kopaska-Merkel *et al.*, 2005).

The Valley and Ridge aquifer system in Shelby County has a yield potential that varies locally, with a maximum yield of 1,600 gallons per minute (gpm). In western Shelby County, groundwater generally flows toward the Coosa River, and much of this area is a recharge zone for the Valley and Ridge Aquifer system (Kopaska-Merkel *et al.*, 2005). Ground water in Shelby County is generally of good quality and is suitable for most uses, but the high iron content or hardness may be objectionable for some uses (Shamburger and Harkins, 1980). As of 2005, 2% of total freshwater use, or 20.54 million gallons per day (mgd) out of a total of 812.71 mgd, came from groundwater in Shelby County (USGS, 2005).

4.0 GROUNDWATER MONITORING SYSTEM AND ACTIVITY

Pursuant to §257.91 and ADEM Admin. Code r. 335-13-15-.06(2), Plant Gaston has installed a groundwater monitoring system to monitor groundwater within the uppermost aquifer. The certified groundwater monitoring system for the Plant Gaston Gypsum Pond is designed to monitor groundwater passing the waste boundary of the CCR unit within the uppermost aquifer. Wells were located to serve as upgradient and downgradient monitoring locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps. All groundwater monitoring wells were designed and constructed using “Design and Installation of Groundwater Monitoring Wells in Aquifers”, ASTM Subcommittee D18.21, as a guideline. As required by § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f), the following also describes monitoring related-activities performed during the preceding year

4.1 Groundwater Monitoring System

The groundwater monitoring network is comprised of 15 monitoring wells. Monitoring well locations are presented on **Figure 3, Monitoring Well Location Map. Table 1, Groundwater Monitoring Well Network Details**, summarizes the monitoring well construction details and design purpose for the Plant Gaston Gypsum Pond.

Monitoring well locations GN-GSA-MW-2, GN-GSA-MW-3, GN-GSA-MW-14S, and GN-GSA-MW-15 serve as upgradient locations for the Gypsum Pond. Upgradient wells are located north of the Gypsum Pond as determined by water level monitoring and potentiometric surface maps constructed for the site. Monitoring well locations GN-GSA-MW-1 and GN-GSA-MW-4 through GN-GSA-MW-13 are utilized as downgradient locations for the Gypsum Pond. Downgradient locations are located lateral to and south of the Gypsum Pond as determined by water level monitoring and potentiometric surface maps constructed for the site.

Table 1. Groundwater Monitoring Well Network Details

Well ID	Purpose	Installation Date	Northing	Easting	Total Depth	Top of Casing Elevation (feet MSL)	Ground Elevation (feet MSL)	Top of Screen Elevation (feet MSL)	Bottom of Screen Elevation (feet MSL)
GN-GSA-MW-1	Downgradient	11/5/2015	1002932.67	465110.34	168.50	426.73	423.21	309.75	299.75
GN-GSA-MW-2	Upgradient	10/28/2015	1003344.33	465112.90	55.00	421.19	417.63	372.88	362.88
GN-GSA-MW-3	Upgradient	10/21/2015	1003093.69	464357.74	54.30	425.30	421.84	379.06	369.06
GN-GSA-MW-4	Downgradient	10/27/2015	1002849.78	463873.54	46.50	427.71	424.87	391.37	381.37
GN-GSA-MW-5	Downgradient	11/19/2015	1002321.38	464049.62	55.00	429.49	426.08	392.47	382.47
GN-GSA-MW-6	Downgradient	11/17/2015	1001935.61	464191.94	45.00	427.64	424.55	390.70	380.70
GN-GSA-MW-7	Downgradient	11/10/2015	1001142.07	464485.43	50.00	423.79	420.38	385.22	375.22
GN-GSA-MW-8	Downgradient	10/28/2015	1000455.33	464781.68	54.90	417.58	414.51	376.45	366.45
GN-GSA-MW-9	Downgradient	10/29/2015	1000625.59	465070.63	44.00	417.68	414.76	381.13	371.13
GN-GSA-MW-10	Downgradient	12/9/2015	1000898.07	465327.37	40.00	418.04	414.78	386.53	376.53
GN-GSA-MW-11	Downgradient	11/12/2015	1001309.48	465221.83	31.00	417.69	414.81	393.48	383.48
GN-GSA-MW-12	Downgradient	10/29/2015	1001872.32	465065.28	36.00	417.10	413.80	394.16	384.16
GN-GSA-MW-13	Downgradient	12/15/2015	1002342.50	465346.71	45.00	422.74	419.82	384.58	374.58
GN-GSA-MW-14S	Upgradient	5/3/2016	1003222.16	464632.71	52.00	424.06	420.32	391.08	381.08
GN-GSA-MW-15	Upgradient	5/5/2016	1003002.35	464146.68	46.31	426.19	422.53	386.62	376.62

Notes: 1. Northing and easting are in feet relative to the State Plane Alabama West North America Datum of 1983.
 2. Elevations are in feet relative to the North American Vertical Datum of 1988.

4.2 Monitoring Well Installation and Maintenance

There was no change to the groundwater monitoring system in 2018; the network remained the same as in the 2017 (previous) reporting year. Monitoring well-related activities were limited to the following: Visual inspection of well conditions prior to sampling, recording the site conditions, and performing exterior maintenance to perform sampling under safe and clean conditions.

4.3 Assessment Monitoring

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 Appendix IV parameters in February 2018, within 90 days of initiating the assessment monitoring program. Pursuant to 40 CFR §257.95(d) and ADEM Admin. Code r. 335-13-15-.06(6)(d) monitoring wells were subsequently sampled for Appendix III and Appendix IV parameters in June and October 2018. The June 2018 event was conducted within 90 days of obtaining the results from the February 2018 sampling event. Samples were collected from wells in the Professional Engineer (PE)-certified monitoring systems shown on **Figure 3**. A summary of groundwater sampling events completed in 2018 is provided in **Table 2, Compliance Sampling Events Summary**.

Analytical data from the initial assessment and semi-annual monitoring events are included as **Appendix A, Groundwater Analytical Data**, in accordance with the requirements of §257.90(e)(3) and ADEM Admin. Code r. 335-13-15-.06(1)(f)3.

Table 2. Compliance Sampling Events Summary			
	Sampling Purpose	Constituents Sampled	Laboratory Receipt Date
Compliance Event 1	Initial Assessment	Appendix IV	4/13/2018
Compliance Event 2	Assessment Monitoring	Appendices III and IV	7/25/2018
Compliance Event 3	Assessment Monitoring	Appendices III and IV	11/28/2018

4.4 Additional Groundwater Sampling

Additional groundwater sampling was performed in October to further characterize groundwater quality at the site. Groundwater samples were collected following the procedures described in Section 5.0. Analytical results are included in **Appendix A**. Additional sampling was completed for the following analytes:

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- Alkalinity, Total
- Bicarbonate Alkalinity
- Calcium, Total
- Carbonate Alkalinity
- Chloride
- Conductivity
- Dissolved Oxygen
- Dissolved Solids
- Iron, Dissolved
- Iron, Total
- Magnesium, Total
- Manganese, Dissolved
- Manganese, Total
- ORP
- pH
- pH for Alkalinity
- Potassium, Total
- Sodium, Total
- Sulfate
- Temperature
- Turbidity

5.0 SAMPLING METHODOLOGY AND ANALYSIS

The following describes the methods used to conduct assessment monitoring at the Plant Gaston Gypsum Pond.

5.1 Groundwater Flow Direction, Gradient, and Velocity

Prior to each sampling event, groundwater levels were measured and recorded to the nearest 0.01 foot within a 24-hour period from the certified well network and piezometers. Groundwater levels recorded during the monitoring events are summarized in **Table 3, Groundwater Elevations Summary 2018**. Groundwater levels and top of casing elevations were used to calculate groundwater elevation and develop the potentiometric surface elevation contour map provided as **Figures 4 through 6, Potentiometric Surface Contour Map(s)**. The general direction of groundwater flow is north to south. The groundwater flow pattern observed during the 2018 monitoring events is consistent with historic observations.

Table 3				
Groundwater Elevations Summary 2018				
Well ID	Top of Casing Elevation	Groundwater Elevations		
		(feet MSL)		
	(feet MSL)	Feb-18	Jun-18	Oct-18
GN-GSA-MW-1	426.35	399.65	398.46	394.85
GN-GSA-MW-2	420.92	398.87	401.10	397.32
GN-GSA-MW-3	424.75	401.54	404.58	399.30
GN-GSA-MW-4	427.65	NM	NM	NM
GN-GSA-MW-5	429.33	400.29	399.37	395.86
GN-GSA-MW-6	427.40	399.56	398.60	395.70
GN-GSA-MW-7	423.47	397.85	396.61	394.57
GN-GSA-MW-8	417.31	396.91	395.80	393.81
GN-GSA-MW-9	417.51	398.95	396.36	394.08
GN-GSA-MW-10	417.73	397.08	395.93	393.71
GN-GSA-MW-11	417.47	396.91	395.87	394.17
GN-GSA-MW-12	416.71	397.96	396.48	394.56
GN-GSA-MW-13	422.42	400.41	398.20	394.46
GN-GSA-MW-14S	421.12	397.06	399.40	395.20
GN-GSA-MW-15	423.06	403.63	404.53	397.04

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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. Based on slug test data at the site, the average hydraulic conductivity is 0.0256 ft/d or 1.49×10^{-4} cm/second., which is used in the flow calculations. An effective porosity of 0.15 was used based on the default values for effective porosity recommended by USEPA for a silty sand-type soil (U.S. USEPA, 1996).

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 ($\frac{feet}{day}$)
- K = Average permeability of the aquifer ($\frac{feet}{day}$)
- i = Horizontal hydraulic gradient
- n_e = Effective porosity

Using this equation, groundwater flow velocities are calculated for various areas of the site and are tabulated on **Table 4, Flow Rate Calculations**. **Table 4** presents the velocities calculated using groundwater elevation data from the most recent sampling event in 2018.

TABLE 4. Flow Rate Calculations								
Date	K	η_e	MW-2	MW-8	Δh	L	i	v
6/4/2018	2.56×10^{-3}	0.15	397.32	393.81	3.51	2,890	0.0012	2.04×10^{-4} ft/d

As presented on **Table 4** groundwater flow velocity at the site ranges from approximately 0.000204 feet/day (or approximately 0.07446 feet/year) across the gypsum pond. Calculated gradients and flow rates do not consider vertical flow gradients.

5.2 Groundwater Sampling

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

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

During purging and sampling a SmarTroll instrument was used to monitor and record field parameters. Once stabilization was achieved, samples were collected and submitted to the laboratory following standard chain-of-custody (COC) protocol.

5.3 Laboratory Analysis

Laboratory analyses was performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama or Test America, Inc. (TAL), of Pensacola, Florida and St. Louis, Missouri. Both APCEL and TAL are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed. Groundwater data and chain of custody records for the monitoring events are presented in **Appendix A**.

5.4 Quality Assurance/Quality Control

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at a rate of one sample per every 10 detection samples. Equipment blanks and duplicate samples were also collected during each sampling event. QA/QC sample data was evaluated during data validation and is included in **Appendix A**.

Groundwater quality data for the most recent sampling event was validated for the most recent sampling event following guidance from the EPA Region IV Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (November 2001); the EPA Region IV Data Validation Standard

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Operating Procedures (US EPA Region IV, September 2011); and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post digestion spikes, laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits.

Where appropriate, validation qualifiers and flags are applied to the data using the procedures in EPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance. Flagged data is identified in the statistical analysis reports.

6.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III and IV groundwater monitoring data was performed on samples collected from the certified groundwater monitoring network pursuant to 40 CFR §257.93 and ADEM Admin. Code r. 335-13-15-.06(4) and following the appropriate PE-certified method. The statistical method used at the site was developed by Groundwater Stats Consulting, LLC. (GSC), in accordance with 40 CFR §257.93(f) and ADEM Admin. Code r. 335-13-15-.06(4)(f), using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, EPA 530/R-09-007 (USEPA, 2009).

6.1 Statistical Methods

The Sanitas groundwater statistical software was used to perform the statistical analyses. Sanitas is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations. Although Assessment Monitoring has been implemented, statistical evaluation of Appendix III constituents is performed to determine if constituents have returned to background conditions. Statistical analysis was performed using methods described in the PE-certified statistical analysis plan for the site.

6.1.1 Appendix III Constituents

Statistical tests used to evaluate the groundwater monitoring data consist of intrawell and interwell prediction limit methods. The intrawell prediction limits, combined with the 1-of-3 verification resample plan, are used for calcium, chloride, sulfate, and total dissolved solids (TDS) to determine whether there has been a statistically significant increase (SSI) over background groundwater quality. Interwell prediction limits, combined with the 1-of-2 verification resample plan, are used to evaluate boron, fluoride, and pH. Intrawell prediction limits use 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 SSI 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.

A summary table of the statistical limits accompanies the prediction limits in **Appendix B, Statistical Data Evaluation**.

6.1.2 Assessment Monitoring Statistics

Parametric tolerance limits were used to calculate background limits from pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The background limits were then used when determining the groundwater protection standard (GWPS).

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

- (1) The maximum contaminant level established under §141.62 and 141.66 of this title (the “MCL”).
- (2) Where an MCL has not been established:
 - (i) Cobalt 6 micrograms per liter (ug/l);
 - (ii) Lead 15 ug/l;
 - (iii) Lithium 40 ug/l; and
 - (iv) Molybdenum 100 ug/l.
- (3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

Existing ADEM Admin Code r. 335-13-15 includes boron as an Appendix IV assessment monitoring parameter; therefore, it is included in the statistical analysis for the site. As explained in the Preamble to the federal CCR rule, the GWPSs listed above for cobalt, lead, lithium, and molybdenum are USEPA-established “Regional Screening Levels” (RSLs) that are used where an MCL has not been established. Following the procedure used by USEPA for the federal CCR rule, the USEPA-established RSL for boron (4.0 mg/L) was used as a GWPS for statistical comparison of boron data. **Table 5, Summary of Background Levels and Groundwater Protection Standards**, summarizes the background limit established at each monitoring well and the GWPS.

Table 5. Summary of Background Levels and Groundwater Protection Standards			
Analyte	Units	Background	GWPS
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.06031, 0.0622	2
Beryllium	mg/L	0.003	0.004
Boron	mg/L	0.1	4.0
Cadmium	mg/L	0.001	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.01	0.006
Fluoride	mg/L	0.3	4
Lead	mg/L	0.005	0.015
Lithium	mg/L	0.05, 0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01	0.1
Selenium	mg/L	0.01	0.05
Thallium	mg/L	0.001	0.002
Total Radium-226/228	pCi/L	1.6	5

Notes:

1. Where 2 numbers are present, they denote the different background levels and background-derived GWPS for each of the 2 semi-annual monitoring events in the order that they were determined.

6.2 Statistical Analysis Results

Analytical data from the 2018 semi-annual monitoring events in June and October were statistically analyzed in accordance with the PE-certified Statistical Analysis Plan (October 2017). Appendix III statistical analysis was performed to determine if constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

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

6.2.1 First Semi-Annual Groundwater Monitoring Event

Statistical analysis of Appendix IV data identified the following statistically significant levels (SSLs) over GWPS at the listed wells:

- GN-GSA-MW-1: Arsenic

6.2.2 Second Semi-Annual Groundwater Monitoring Event

Review of the Sanitas results presented in **Appendix B** did not identify any SSLs during the second semi-annual detection monitoring event.

7.0 ALTERNATE SOURCE DEMONSTRATIONS

Section 257.95(g)(3)(ii) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4 allows the owner or operator to demonstrate that a source other than the CCR Unit has caused an SSL and that the SSL was the result of an alternate source or resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

An Alternate Source Demonstration (ASD) report for SSLs identified is included as **Appendix C, Alternate Source Demonstration**. As discussed in the ASD report, the apparent SSLs are the result of natural groundwater chemistry variability not accounted for by site statistics. In accordance with §257.95(g)(3) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4, this ASD demonstrates that the SSLs are not the result of a release from the CCR Landfill and no further action, such as implementing an assessment of corrective measures, is necessary.

8.0 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 15, 2018. SSIs of Appendix III and SSLs of Appendix IV parameters were identified at the Plant Gaston Gypsum Pond during sampling events conducted in 2018. ASDs have been completed for every Appendix IV constituent exceeding the GWPS; therefore, in accordance with §257.95(g)(3)(ii) and Alabama Admin. Code r. 335-13-15-.06(6)(g)4(ii), APC will continue assessment monitoring and will not implement assessment of corrective measures required by §257.96 and ADEM Admin. Code r. 335-13-15-.06(7). A complete ASD report is provided in **Appendix C**.

9.0 CONCLUSIONS AND FUTURE ACTIONS

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

The certified compliance monitoring well network was resampled on a semi-annual basis, occurring in June and October 2018. The groundwater samples were analyzed for all Appendix III & IV parameters. The data from the semi-annual events were statistically evaluated relative to GWPS. Statistical evaluations of the June 2018 assessment monitoring data identified SSLs of Appendix IV constituents above the GWPS.

ASDs have been completed for the Appendix IV constituent exceeding the GWPS; therefore, in accordance with §257.95(g)(3)(ii) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4(ii), APC will continue assessment monitoring and will not implement assessment of corrective measures described in §257.96 and ADEM Admin. Code r. 335-13-15-.06(7).

The first semi-annual assessment monitoring event is planned for April 2019.

10.0 REFERENCES

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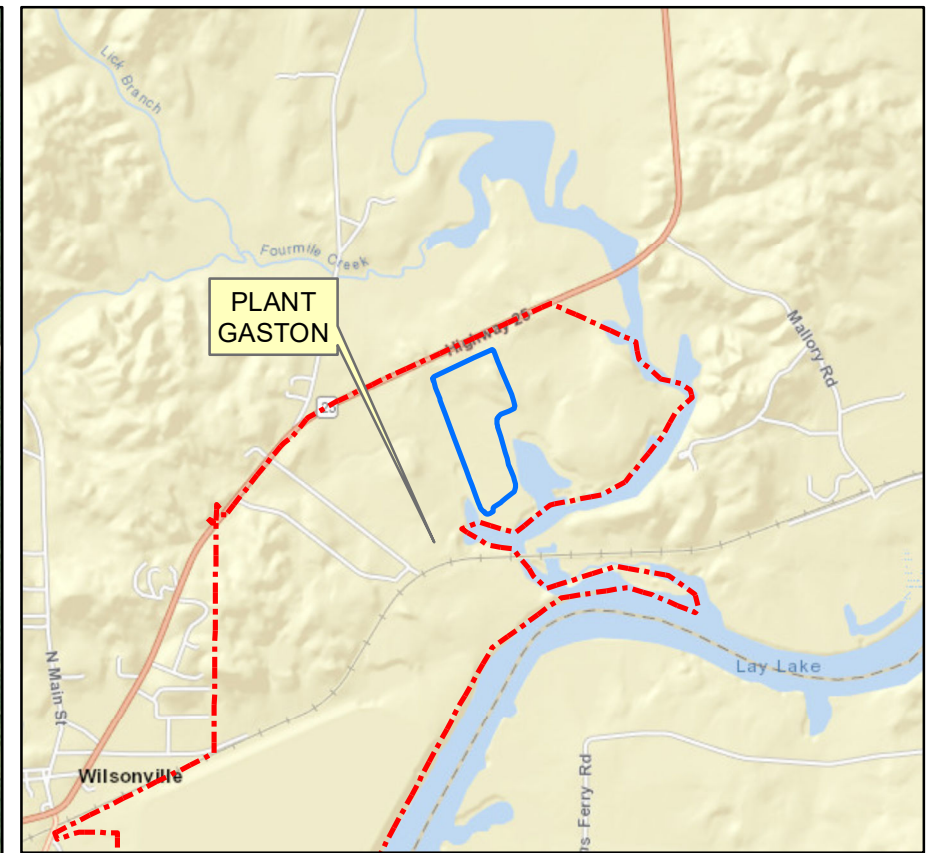
Plant Gaston Gypsum Pond
2018 Annual Groundwater Monitoring and Corrective Action Report

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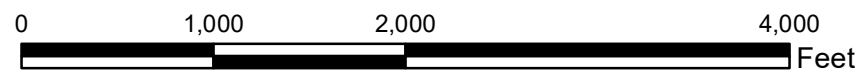
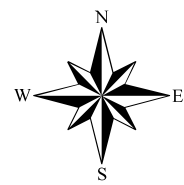
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Figures



Legend

- Gypsum Pond
- Property Boundary (Approximate)



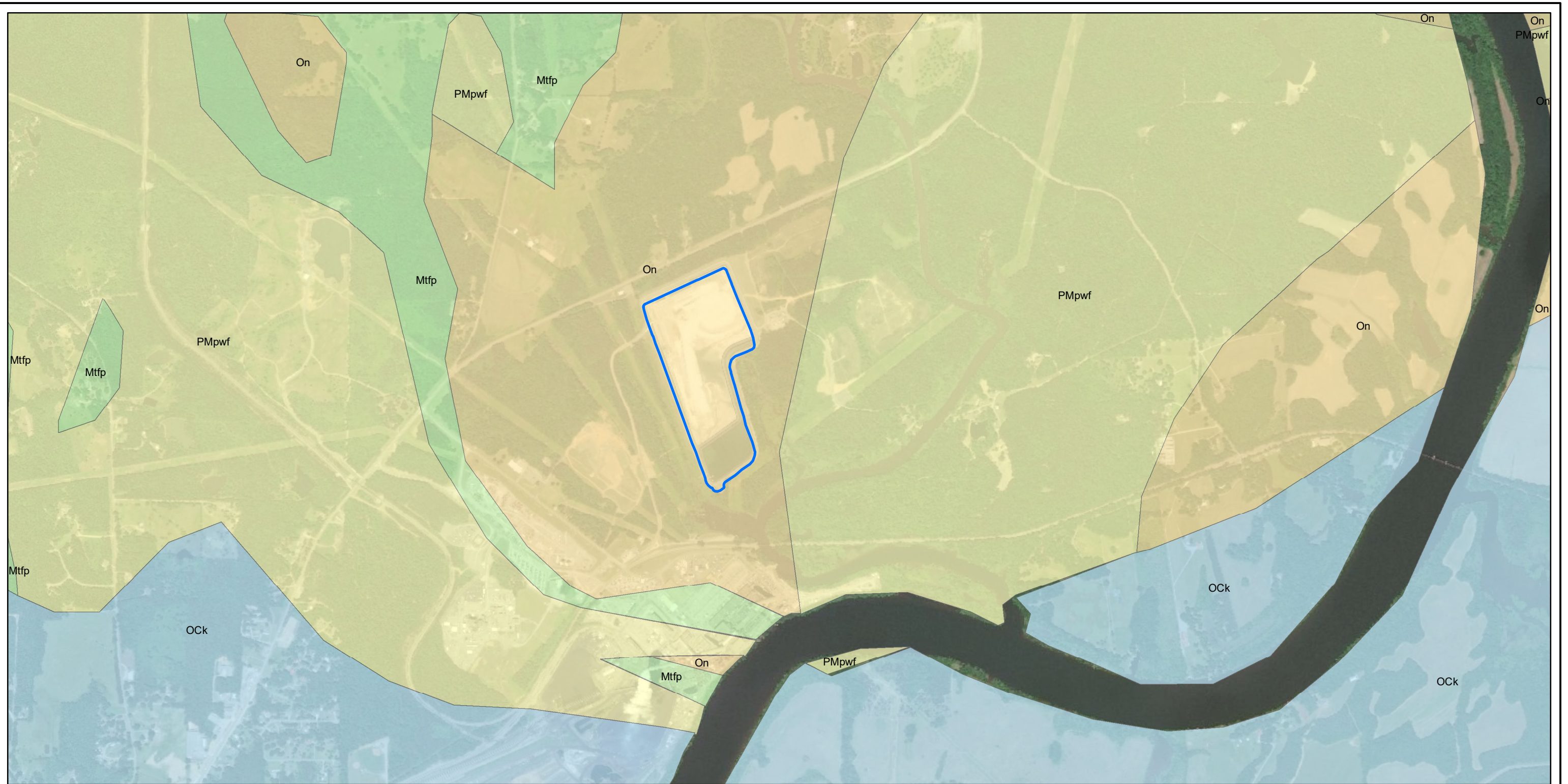
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Southern Company Generation
Earth Science and Environmental Engineering

FOR

FIGURE 1
SITE LOCATION MAP
PLANT GASTON GYPSUM POND

Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:12k		FIGURE 1	1		



Legend

Gypsum_Pond

Geologic Units

- Knox Group undifferentiated (Ock)
- Newala Limestone (On)
- Parkwood Formation and Floyd Shale undifferentiated (PMpwf)
- Tuscumbia Limestone and Fort Payne Chert undifferentiated (Mtf)

N
W E
S

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

 Feet

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FIGURE 2
SITE GEOLOGIC MAP
PLANT GASTON GYPSUM POND




Southern Company Generation
Earth Science and Environmental Engineering

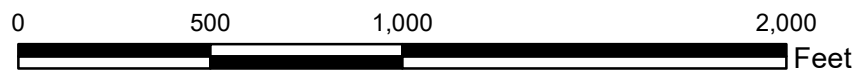
FOR

Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:15k		FIGURE 2	1		



Legend

-  Monitoring Well Network
-  Gypsum Pond Boundary
-  Property Boundary (Approximate)



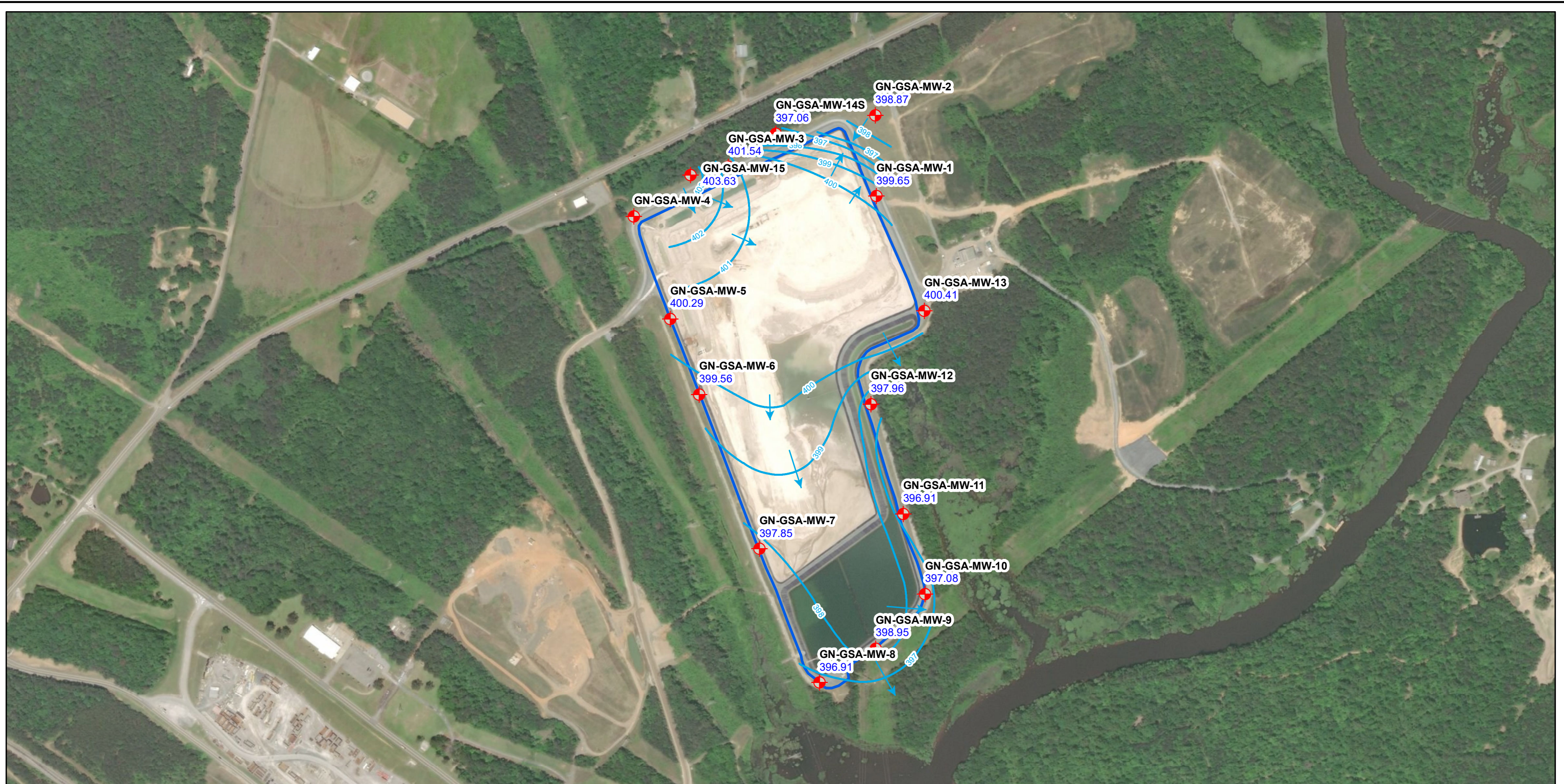
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FIGURE 3
MONITORING WELL LOCATION MAP
PLANT GASTON GYPSUM POND


Southern Company Generation
Earth Science and Environmental Engineering




FOR

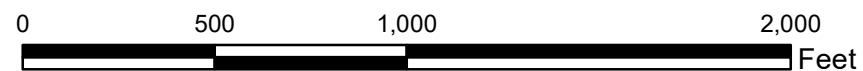
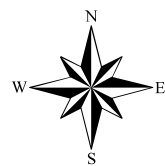
Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:6k		FIGURE 3	1		



Legend

- 
Monitoring Well

GN-AP-MW-1	Well ID
399.65	Groundwater Elevation
- 
Potentiometric Surface Contour (ft NAVD88)
- 
Approximate Groundwater Flow Direction
- 
Gypsum Storage Area Boundary



NOTE: NAVD88 indicates North American Vertical Datum of 1988.

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FIGURE 4
 POTENTIOMETRIC SURFACE MAP
 FEBRUARY 2018
 PLANT GASTON GYPSUM POND

**Southern Company Generation
 Earth Science and Environmental Engineering**

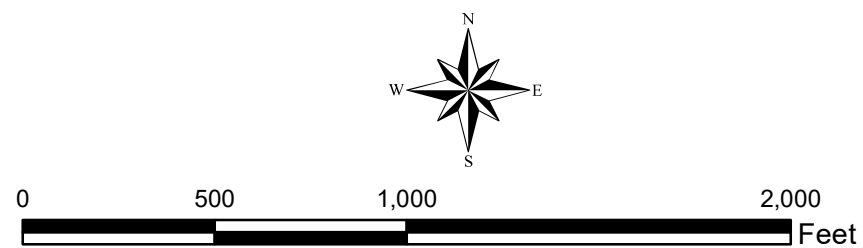
FOR

Alabama Power Company

SCALE	PROJ. I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:6k		FIGURE 4	1		



Legend	
	Monitoring Well
	Potentiometric Surface Contour (ft NAVD88)
	Approximate Groundwater Flow Direction
	Gypsum Storage Area Boundary



NOTE: NAVD88 indicates North American Vertical Datum of 1988.

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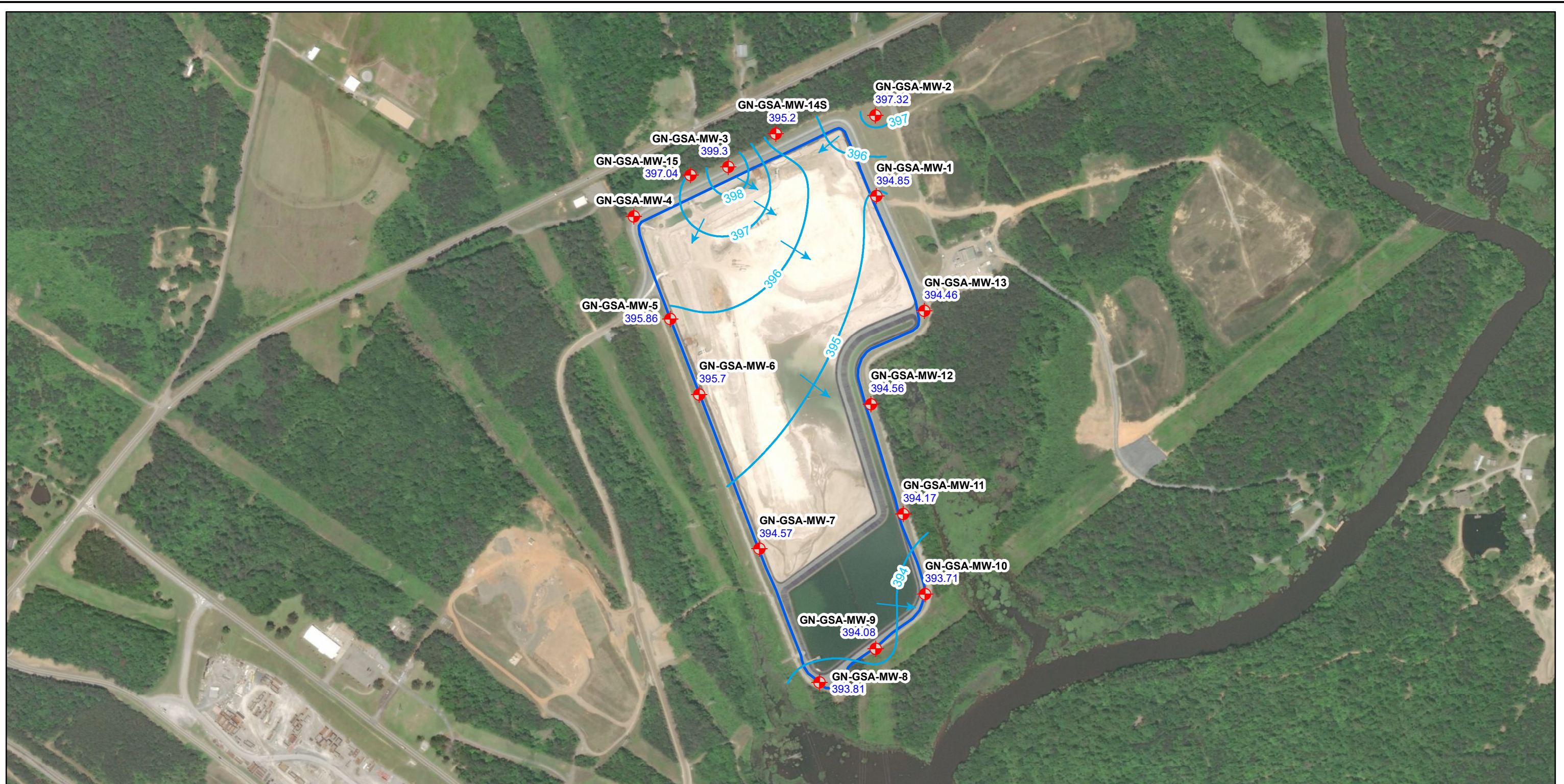
FIGURE 5
POTENTIOMETRIC SURFACE MAP
JUNE 2018
PLANT GASTON GYPSUM POND

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Earth Science and Environmental Engineering

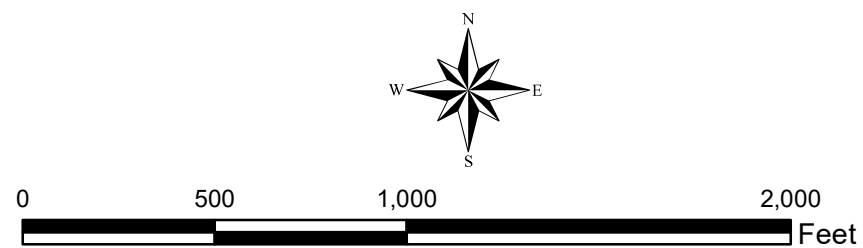
FOR

Alabama Power Company

SCALE	PROJ. I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:6k		FIGURE 5	1		



Legend	
	Monitoring Well
	Well ID
	Groundwater Elevation
	Potentiometric Surface Contour (ft NAVD88)
	Approximate Groundwater Flow Direction
	Gypsum Storage Area Boundary



NOTE: NAVD88 indicates North American Vertical Datum of 1988.

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FIGURE 6
 POTENTIOMETRIC SURFACE MAP
 OCTOBER 2018
 PLANT GASTON GYPSUM POND

**Southern Company Generation
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FOR

Alabama Power Company

SCALE	PROJ. I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:6k		FIGURE 6	1		

Appendix A

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 Pond

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

Analytical Report



Sample Group : WMWGASG_1134
Project/Site : Gaston Gypsum
Wilsonville, AL 35186
For : Southern Company Services
42 Inverness Center Parkway
Birmingham, AL 35242
Attention : Dustin Brooks & Greg Dyer
Released By : Sarah Copeland
sgcopela@southernco.com
(205) 664-6121

The following data has been reviewed and approved by:

Quality Control: Sarah
Copeland

Digitally signed by Sarah Copeland
DN: cn=Sarah Copeland, o=ou,
email=sgcopela@southernco.com,
c=US
Date: 2018.03.08 11:47:11 -06'00'

Supervision: T. Durant
Maske

Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama
Power Company, ou=Environmental
Affairs, email=tdmaske@southernco.com,
c=US
Date: 2018.03.09 09:32:17 -06'00'

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

Case Narrative



Fluoride

Gaston Gypsum

WMWGASG_1134

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. All samples were received intact and properly preserved.
3. All samples were outsourced to Test America, Pensacola for analysis. There was no job narrative provided, as there were no issues found.



Metals ICP

Gaston Gypsum

WMWGASG_1134

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY03285	20180220K	WMWGASG_1134
AY03286	20180220K	WMWGASG_1134
AY03287	20180220K	WMWGASG_1134
AY03288	20180220K	WMWGASG_1134
AY03289	20180220K	WMWGASG_1134
AY03290	20180220K	WMWGASG_1134
AY03291	20180220K	WMWGASG_1134
AY03292	20180220K	WMWGASG_1134
AY03293	20180220K	WMWGASG_1134
AY03294	20180220K	WMWGASG_1134
AY03295	20180220AK	WMWGASG_1134
AY03296	20180220AK	WMWGASG_1134
AY03297	20180220AK	WMWGASG_1134
AY03298	20180220AK	WMWGASG_1134
AY03299	20180220AK	WMWGASG_1134
AY03300	20180220AK	WMWGASG_1134
AY03301	20180220AK	WMWGASG_1134
AY03302	20180220AK	WMWGASG_1134
AY03303	20180220AK	WMWGASG_1134

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 before sample analysis.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.



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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
7. All samples were analyzed at a x2.03 dilution to compensate for any potential matrix effects.
 8. The raw data results include results corrected for dilution.



Metals ICPMS

Gaston Gypsum

WMWGASG_1134

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY03285	612588	WMWGASG_1134
AY03286	612588	WMWGASG_1134
AY03287	612588	WMWGASG_1134
AY03288	612588	WMWGASG_1134
AY03289	612588	WMWGASG_1134
AY03290	612588	WMWGASG_1134
AY03291	612588	WMWGASG_1134
AY03292	612588	WMWGASG_1134
AY03293	612588	WMWGASG_1134
AY03294	612588	WMWGASG_1134
AY03295	612589	WMWGASG_1134
AY03296	612589	WMWGASG_1134
AY03297	612589	WMWGASG_1134
AY03298	612589	WMWGASG_1134
AY03299	612589	WMWGASG_1134
AY03300	612589	WMWGASG_1134
AY03301	612589	WMWGASG_1134
AY03302	612589	WMWGASG_1134
AY03303	612589	WMWGASG_1134

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

General Quality Control Procedures:

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



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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.
7. All samples were analyzed at a dilution of 1 to 5 to compensate for any matrix effects.
 8. The raw data results are shown with dilution factors included.



Mercury

Gaston Gypsum

WMWGASG_1134

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY03285	612674	WMWGASG_1134
AY03286	612674	WMWGASG_1134
AY03287	612674	WMWGASG_1134
AY03288	612674	WMWGASG_1134
AY03289	612674	WMWGASG_1134
AY03290	612674	WMWGASG_1134
AY03291	612674	WMWGASG_1134
AY03292	612674	WMWGASG_1134
AY03293	612674	WMWGASG_1134
AY03294	612674	WMWGASG_1134
AY03295	612675	WMWGASG_1134
AY03296	612675	WMWGASG_1134
AY03297	612675	WMWGASG_1134
AY03298	612675	WMWGASG_1134
AY03299	612675	WMWGASG_1134
AY03300	612675	WMWGASG_1134
AY03301	612675	WMWGASG_1134
AY03302	612675	WMWGASG_1134
AY03303	612675	WMWGASG_1134

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

General Quality Control Procedures:

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



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

Matrix Specific Quality Control Procedures:

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

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

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY03285

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0325	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY03285

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115	105	70 to 130	1.42	20	
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	3.51	20	
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115	91.5	70 to 130	5.97	20	
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23	96.6	70 to 130	0.811	20	
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115	99.2	70 to 130	2.36	20	
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115	94.1	70 to 130	4.48	20	
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115	100	70 to 130	3.26	20	
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115	91.7	70 to 130	4.26	20	
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115	96.1	70 to 130	2.67	20	
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115	99.5	70 to 130	3.66	20	
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046	93.6	70 to 130	0.665	20	
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115	91.7	70 to 130	3.16	20	
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115	95.3	70 to 130	3.83	20	

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY03285

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY03286

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0469	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY03286

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115		105	70 to 130		1.42	20
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115		91.5	70 to 130		5.97	20
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115		95.3	70 to 130		3.83	20
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115		94.1	70 to 130		4.48	20
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115		100	70 to 130		3.26	20
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115		102	70 to 130		3.51	20
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115		91.7	70 to 130		4.26	20
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115		96.1	70 to 130		2.67	20
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115		99.5	70 to 130		3.66	20
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046		93.6	70 to 130		0.665	20
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115		91.7	70 to 130		3.16	20
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23		96.6	70 to 130		0.811	20
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115		99.2	70 to 130		2.36	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY03286

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	Limit	Rec	Prec
							Duplicate	LCS		Limit	Limit

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-13 Dup

Laboratory ID Number: AY03287

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0465	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-13 Dup

Laboratory ID Number: AY03287

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115		105	70 to 130	1.42	20
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115		102	70 to 130	3.51	20
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115		95.3	70 to 130	3.83	20
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115		94.1	70 to 130	4.48	20
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115		100	70 to 130	3.26	20
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115		91.5	70 to 130	5.97	20
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115		91.7	70 to 130	4.26	20
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115		96.1	70 to 130	2.67	20
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115		99.5	70 to 130	3.66	20
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046		93.6	70 to 130	0.665	20
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115		91.7	70 to 130	3.16	20
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23		96.6	70 to 130	0.811	20
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115		99.2	70 to 130	2.36	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-13 Dup

Laboratory ID Number: AY03287

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY03288

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	0.0140	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	1.80	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	J 0.00908	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	0.37	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY03288

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115	105	70 to 130	1.42	20	
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115	91.5	70 to 130	5.97	20	
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	3.51	20	
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115	94.1	70 to 130	4.48	20	
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115	100	70 to 130	3.26	20	
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115	91.7	70 to 130	4.26	20	
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115	96.1	70 to 130	2.67	20	
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115	99.5	70 to 130	3.66	20	
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046	93.6	70 to 130	0.665	20	
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115	91.7	70 to 130	3.16	20	
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23	96.6	70 to 130	0.811	20	
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115	99.2	70 to 130	2.36	20	
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115	95.3	70 to 130	3.83	20	

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY03288

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	Limit	Rec	Prec
							Duplicate	LCS		Limit	Prec

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY03289

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	J 0.00127	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0254	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	J 0.080	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY03289

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115	105	70 to 130	1.42	20	
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	3.51	20	
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115	95.3	70 to 130	3.83	20	
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115	91.5	70 to 130	5.97	20	
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115	94.1	70 to 130	4.48	20	
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115	100	70 to 130	3.26	20	
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23	96.6	70 to 130	0.811	20	
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115	99.2	70 to 130	2.36	20	
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115	91.7	70 to 130	4.26	20	
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115	96.1	70 to 130	2.67	20	
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115	99.5	70 to 130	3.66	20	
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046	93.6	70 to 130	0.665	20	
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115	91.7	70 to 130	3.16	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 05-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY03289

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec
			Limit				Duplicate	LCS			Limit	Limit	Prec	Limit

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY03290

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0418	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	J 0.00274	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY03290

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115		91.5	70 to 130	5.97	20
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115		102	70 to 130	3.51	20
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115		95.3	70 to 130	3.83	20
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115		94.1	70 to 130	4.48	20
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115		100	70 to 130	3.26	20
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115		105	70 to 130	1.42	20
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23		96.6	70 to 130	0.811	20
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115		99.2	70 to 130	2.36	20
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115		91.7	70 to 130	4.26	20
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115		96.1	70 to 130	2.67	20
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115		99.5	70 to 130	3.66	20
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046		93.6	70 to 130	0.665	20
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115		91.7	70 to 130	3.16	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY03290

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Alabama Power General Test Laboratory
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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY03291

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY03291

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115	105	70 to 130	1.42	20	
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115	95.3	70 to 130	3.83	20	
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115	91.5	70 to 130	5.97	20	
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	3.51	20	
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115	94.1	70 to 130	4.48	20	
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115	100	70 to 130	3.26	20	
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23	96.6	70 to 130	0.811	20	
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115	99.2	70 to 130	2.36	20	
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115	91.7	70 to 130	4.26	20	
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115	96.1	70 to 130	2.67	20	
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115	99.5	70 to 130	3.66	20	
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046	93.6	70 to 130	0.665	20	
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115	91.7	70 to 130	3.16	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY03291

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	Limit	Rec	Prec
							Duplicate	LCS		Limit	Prec

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

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
Sample Date: 06-Feb-18
Customer ID:
Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY03292

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0156	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY03292

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115	105	70 to 130	1.42	20	
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115	91.5	70 to 130	5.97	20	
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	3.51	20	
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115	94.1	70 to 130	4.48	20	
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115	100	70 to 130	3.26	20	
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23	96.6	70 to 130	0.811	20	
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115	99.2	70 to 130	2.36	20	
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115	91.7	70 to 130	4.26	20	
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115	96.1	70 to 130	2.67	20	
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115	99.5	70 to 130	3.66	20	
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046	93.6	70 to 130	0.665	20	
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115	91.7	70 to 130	3.16	20	
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115	95.3	70 to 130	3.83	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY03292

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY03293

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0183	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	J 0.080	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY03293

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115	105	70 to 130	1.42	20	
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	3.51	20	
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115	91.5	70 to 130	5.97	20	
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115	95.3	70 to 130	3.83	20	
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115	94.1	70 to 130	4.48	20	
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115	100	70 to 130	3.26	20	
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115	91.7	70 to 130	4.26	20	
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115	96.1	70 to 130	2.67	20	
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115	99.5	70 to 130	3.66	20	
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046	93.6	70 to 130	0.665	20	
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115	91.7	70 to 130	3.16	20	
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23	96.6	70 to 130	0.811	20	
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115	99.2	70 to 130	2.36	20	

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY03293

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY03294

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	J 0.00131	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0248	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	J 0.00331	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	0.15	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY03294

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03294	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.105	0.106	0.108	0.085 to 0.115		105	70 to 130	1.42	20
AY03294	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115		102	70 to 130	3.51	20
AY03294	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0953	0.0990	0.109	0.085 to 0.115		95.3	70 to 130	3.83	20
AY03294	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.116	0.123	0.0951	0.085 to 0.115		91.5	70 to 130	5.97	20
AY03294	Lithium, Total	mg/L	0.0000571	0.022	0.20	0.193	0.195	0.188	0.17 to 0.23		96.6	70 to 130	0.811	20
AY03294	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0992	0.102	0.100	0.085 to 0.115		99.2	70 to 130	2.36	20
AY03294	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0941	0.0984	0.100	0.085 to 0.115		94.1	70 to 130	4.48	20
AY03294	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.103	0.101	0.085 to 0.115		100	70 to 130	3.26	20
AY03294	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0917	0.0956	0.0981	0.085 to 0.115		91.7	70 to 130	4.26	20
AY03294	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0975	0.100	0.109	0.085 to 0.115		96.1	70 to 130	2.67	20
AY03294	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0995	0.103	0.102	0.085 to 0.115		99.5	70 to 130	3.66	20
AY03294	Mercury, Total by CVAA	mg/L	-0.00000599	0.0005	0.004	0.00374	0.00377	0.00378	0.0034 to 0.0046		93.6	70 to 130	0.665	20
AY03294	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0950	0.0981	0.0948	0.085 to 0.115		91.7	70 to 130	3.16	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY03294

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
Sample Date: 06-Feb-18
Customer ID:
Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY03295

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0232	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Alabama Power General Test Laboratory
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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY03295

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046		94.1	70 to 130	1.13	20
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115		93.7	70 to 130	2.64	20
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115		99.1	70 to 130	3.24	20
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115		90.3	70 to 130	3.20	20
AY03303	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115		94.7	70 to 130	2.92	20
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115		100	70 to 130	2.47	20
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115		92.6	70 to 130	1.71	20
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115		98.9	70 to 130	1.69	20
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115		92.6	70 to 130	1.32	20
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115		107	70 to 130	0.418	20
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115		102	70 to 130	2.49	20
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115		95.2	70 to 130	2.59	20
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23		98.8	70 to 130	0.831	20

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY03295

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS					

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
Sample Date: 06-Feb-18
Customer ID:
Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY03296

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0337	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY03296

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115	93.7	70 to 130	2.64	20	
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115	99.1	70 to 130	3.24	20	
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115	90.3	70 to 130	3.20	20	
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046	94.1	70 to 130	1.13	20	
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115	92.6	70 to 130	1.71	20	
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115	98.9	70 to 130	1.69	20	
AY03303	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115	94.7	70 to 130	2.92	20	
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115	100	70 to 130	2.47	20	
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115	92.6	70 to 130	1.32	20	
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115	107	70 to 130	0.418	20	
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	2.49	20	
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115	95.2	70 to 130	2.59	20	
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23	98.8	70 to 130	0.831	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY03296

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY03297

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	J 0.00614	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	J 0.00324	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY03297

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046	94.1	70 to 130	1.13	20	
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115	93.7	70 to 130	2.64	20	
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115	99.1	70 to 130	3.24	20	
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115	90.3	70 to 130	3.20	20	
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115	92.6	70 to 130	1.71	20	
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115	98.9	70 to 130	1.69	20	
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115	95.2	70 to 130	2.59	20	
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23	98.8	70 to 130	0.831	20	
AY03303	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115	94.7	70 to 130	2.92	20	
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115	100	70 to 130	2.47	20	
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115	92.6	70 to 130	1.32	20	
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115	107	70 to 130	0.418	20	
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	2.49	20	

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY03297

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
Sample Date: 06-Feb-18
Customer ID:
Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY03298

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0340	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY03298

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046	94.1	70 to 130	1.13	20	
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115	93.7	70 to 130	2.64	20	
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115	92.6	70 to 130	1.71	20	
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115	98.9	70 to 130	1.69	20	
AY03303	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115	94.7	70 to 130	2.92	20	
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115	100	70 to 130	2.47	20	
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115	99.1	70 to 130	3.24	20	
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115	90.3	70 to 130	3.20	20	
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115	95.2	70 to 130	2.59	20	
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23	98.8	70 to 130	0.831	20	
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115	92.6	70 to 130	1.32	20	
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115	107	70 to 130	0.418	20	
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	2.49	20	

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY03298

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY03299

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	0.0341	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY03299

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046		94.1	70 to 130		1.13	20
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115		93.7	70 to 130		2.64	20
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115		99.1	70 to 130		3.24	20
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115		90.3	70 to 130		3.20	20
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115		92.6	70 to 130		1.71	20
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115		98.9	70 to 130		1.69	20
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115		92.6	70 to 130		1.32	20
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115		107	70 to 130		0.418	20
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115		102	70 to 130		2.49	20
AY03303	Cadmium, Total	mg/L	0.000000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115		94.7	70 to 130		2.92	20
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115		100	70 to 130		2.47	20
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115		95.2	70 to 130		2.59	20
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23		98.8	70 to 130		0.831	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY03299

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-8 Dup

Laboratory ID Number: AY03300

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	J	0.00131	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01		0.0260	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	J	0.00321	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10		0.14	mg/L

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-8 Dup

Laboratory ID Number: AY03300

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046		94.1	70 to 130	1.13	20
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115		93.7	70 to 130	2.64	20
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115		99.1	70 to 130	3.24	20
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115		90.3	70 to 130	3.20	20
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115		92.6	70 to 130	1.32	20
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115		107	70 to 130	0.418	20
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115		102	70 to 130	2.49	20
AY03303	Cadmium, Total	mg/L	0.00000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115		94.7	70 to 130	2.92	20
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115		100	70 to 130	2.47	20
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115		92.6	70 to 130	1.71	20
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115		98.9	70 to 130	1.69	20
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115		95.2	70 to 130	2.59	20
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23		98.8	70 to 130	0.831	20

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-8 Dup

Laboratory ID Number: AY03300

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Limit	Prec	Limit
							Duplicate	LCS						

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Alabama Power General Test Laboratory
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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY03301

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY03301

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046	94.1	70 to 130	1.13	20	
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115	93.7	70 to 130	2.64	20	
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115	99.1	70 to 130	3.24	20	
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115	90.3	70 to 130	3.20	20	
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115	92.6	70 to 130	1.71	20	
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115	98.9	70 to 130	1.69	20	
AY03303	Cadmium, Total	mg/L	0.00000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115	94.7	70 to 130	2.92	20	
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115	100	70 to 130	2.47	20	
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115	95.2	70 to 130	2.59	20	
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23	98.8	70 to 130	0.831	20	
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115	92.6	70 to 130	1.32	20	
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115	107	70 to 130	0.418	20	
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	2.49	20	

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 06-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY03301

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	Limit	Rec	Prec
							Duplicate	LCS		Limit	Prec

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

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
Sample Date: 07-Feb-18
Customer ID:
Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY03302

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	J 0.00897	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 07-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY03302

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046	94.1	70 to 130	1.13	20	
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115	93.7	70 to 130	2.64	20	
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115	99.1	70 to 130	3.24	20	
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115	90.3	70 to 130	3.20	20	
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115	92.6	70 to 130	1.71	20	
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115	98.9	70 to 130	1.69	20	
AY03303	Cadmium, Total	mg/L	0.00000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115	94.7	70 to 130	2.92	20	
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115	100	70 to 130	2.47	20	
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115	95.2	70 to 130	2.59	20	
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23	98.8	70 to 130	0.831	20	
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115	92.6	70 to 130	1.32	20	
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115	107	70 to 130	0.418	20	
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115	102	70 to 130	2.49	20	

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 07-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY03302

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	Limit	Rec	Prec
							Duplicate	LCS		Limit	Prec

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 07-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY03303

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cadmium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/16/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	2/20/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	2/14/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Fluoride, Total, by Test America	SGC	2/20/2018	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 07-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY03303

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AY03303	Mercury, Total by CVAA	mg/L	-0.00000679	0.0005	0.004	0.00377	0.00381	0.00380	0.0034 to 0.0046		94.1	70 to 130	1.13	20
AY03303	Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0937	0.0962	0.109	0.085 to 0.115		93.7	70 to 130	2.64	20
AY03303	Cadmium, Total	mg/L	0.00000557	0.00066	0.10	0.0947	0.0975	0.100	0.085 to 0.115		94.7	70 to 130	2.92	20
AY03303	Lead, Total	mg/L	-0.00000465	0.0022	0.10	0.1000	0.102	0.101	0.085 to 0.115		100	70 to 130	2.47	20
AY03303	Antimony, Total	mg/L	0.0000171	0.00132	0.10	0.0926	0.0942	0.0981	0.085 to 0.115		92.6	70 to 130	1.71	20
AY03303	Thallium, Total	mg/L	0.0000117	0.00044	0.10	0.0989	0.101	0.100	0.085 to 0.115		98.9	70 to 130	1.69	20
AY03303	Chromium, Total	mg/L	0.00000759	0.0044	0.10	0.0991	0.102	0.102	0.085 to 0.115		99.1	70 to 130	3.24	20
AY03303	Molybdenum, Total	mg/L	0.0000204	0.0044	0.10	0.0903	0.0933	0.0948	0.085 to 0.115		90.3	70 to 130	3.20	20
AY03303	Barium, Total	mg/L	-0.00000193	0.0044	0.10	0.0926	0.0939	0.0951	0.085 to 0.115		92.6	70 to 130	1.32	20
AY03303	Beryllium, Total	mg/L	0.00000896	0.00132	0.10	0.107	0.108	0.108	0.085 to 0.115		107	70 to 130	0.418	20
AY03303	Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.102	0.105	0.0977	0.085 to 0.115		102	70 to 130	2.49	20
AY03303	Arsenic, Total	mg/L	0.00000953	0.0022	0.10	0.0952	0.0977	0.109	0.085 to 0.115		95.2	70 to 130	2.59	20
AY03303	Lithium, Total	mg/L	-0.0000144	0.022	0.20	0.198	0.196	0.186	0.17 to 0.23		98.8	70 to 130	0.831	20

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 07-Feb-18
 Customer ID:
 Delivery Date: 08-Feb-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY03303

Sample	Analysis	Units	MB	Limit	Spike	LFM	Sample	LCS	Limit	Rec	Prec
							Duplicate	LCS		Limit	Prec

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Definitions



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

Qualifier	Description
B	Analyte found in reagent blank. Indicates possible reagent or background contamination.
E	Estimated reported value exceeded calibration range.
J	Reported value is an estimate because concentration is less than reporting limit.
N	Organic constituents tentatively identified. Confirmation is needed.
R	Matrix spike recovery is out of range.
U	Compound was analyzed, but not detected.
P	Precision is out of range.
C	Analyte was verified by re-analysis.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.
L	Check standard is outside of the required specification limit.
D	All samples were stored at less than or equal to 6 °C and for no longer than 48 hours from time of sampling, unless otherwise noted.
F	Water Field Group (WFG) qualifier; see comments for more information



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 02/08/2018 07:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Tanisha Fenderson	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gaston Gypsum
Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (250mL): Anions		
Comments	Fluoride outsourced to Test America, Pensacola for analysis. There is no temperature preservation requirement for analyses requested.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2	02/05/2018	11:43	3	Groundwater		AY03285
MW-13	02/05/2018	12:45	3	Groundwater		AY03286
MW-13DUP	02/05/2018	12:45	3	Sample Duplicate		AY03287
MW-1	02/05/2018	14:14	3	Groundwater		AY03288
MW-12	02/05/2018	15:35	3	Groundwater		AY03289
MW-5	02/06/2018	09:03	3	Groundwater		AY03290
FB-1	02/06/2018	08:46	3	Field Blank		AY03291
MW-6	02/06/2018	10:21	3	Groundwater		AY03292
MW-7	02/06/2018	11:21	3	Groundwater		AY03293
MW-8	02/06/2018	12:21	3	Groundwater		AY03294
MW-9	02/06/2018	13:39	3	Groundwater		AY03295
MW-10	02/06/2018	14:25	3	Groundwater		AY03296
MW-11	02/06/2018	15:31	3	Groundwater		AY03297
MW-14s	02/06/2018	16:14	3	Groundwater		AY03298
MW-3	02/06/2018	17:48	3	Groundwater		AY03299
MW-8DUP	02/06/2018	12:21	3	Sample Duplicate		AY03300
FB-2	02/06/2018	17:22	3	Field Blank		AY03301
MW-15	02/07/2018	14:36	3	Groundwater		AY03302
EB-1	02/07/2018	14:57	3	Equipment Blank		AY03303

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernco.com, c=US Date: 2018.02.08 07:49:16 -06'00'</small>	02/08/2018 07:49

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23343-4-2	Cooler Temp
		NA
		Thermometer ID
		NA
		pH Strip ID
		5881-30151-10-5



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 02/08/2018 07:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Tanisha Fenderson	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gaston Gypsum
Analysis Requested	Bottle 1 (1L): Radiological		
Comments	Radium Duplicate collected at MW-5. There is no temperature preservation requirement for Radium. Time correction for FB-1		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2	02/05/2018	11:43	1	Groundwater		AY03304
MW-13	02/05/2018	12:45	1	Groundwater		AY03305
MW-13DUP	02/05/2018	12:45	1	Sample Duplicate		AY03306
MW-1	02/05/2018	14:14	1	Groundwater		AY03307
MW-12	02/05/2018	15:35	1	Groundwater		AY03308
MW-5	02/06/2018	09:03	3	Groundwater		AY03309
FB-1	02/06/2018	08:46	1	Field Blank		AY03310
MW-6	02/06/2018	10:21	1	Groundwater		AY03311
MW-7	02/06/2018	11:21	1	Groundwater		AY03312
MW-8	02/06/2018	12:21	1	Groundwater		AY03313
MW-9	02/06/2018	13:39	1	Groundwater		AY03314
MW-10	02/06/2018	14:25	1	Groundwater		AY03315
MW-11	02/06/2018	15:31	1	Groundwater		AY03316
MW-14S	02/06/2018	16:14	1	Groundwater		AY03317
MW-3	02/06/2018	17:48	1	Groundwater		AY03318
MW-8DUP	02/06/2018	12:21	1	Sample Duplicate		AY03319
MW-15	02/07/2018	14:36	1	Groundwater		AY03320
EB-1	02/07/2018	14:57	1	Equipment Blank		AY03321
FB-2	02/06/2018	17:22	1	Field Blank		AY03322

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernco.com, c=US Date: 2018.02.08 07:46:57 -0600</small>	02/08/2018 07:46

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23343-4-2	Cooler Temp
		Thermometer ID
		pH Strip ID
		NA
		NA
		5881-30151-10-5

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-149575-1

TestAmerica Sample Delivery Group: Gaston Gypsum 1134

Client Project/Site: CCR Plant Gaston

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

2/19/2018 4:46:45 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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

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Detection Summary

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03285 MW-2

Lab Sample ID: 400-149575-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03286 MW-13

Lab Sample ID: 400-149575-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03287 MW-13 DUP

Lab Sample ID: 400-149575-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03288 MW-1

Lab Sample ID: 400-149575-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.37		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03289 MW-12

Lab Sample ID: 400-149575-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03290 MW-5

Lab Sample ID: 400-149575-6

No Detections.

Client Sample ID: AY03291 FB-1

Lab Sample ID: 400-149575-7

No Detections.

Client Sample ID: AY03292 MW-6

Lab Sample ID: 400-149575-8

No Detections.

Client Sample ID: AY03293 MW-7

Lab Sample ID: 400-149575-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03294 MW-8

Lab Sample ID: 400-149575-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.15		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03295 MW-9

Lab Sample ID: 400-149575-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03296 MW-10

Lab Sample ID: 400-149575-12

No Detections.

Client Sample ID: AY03297 MW-11

Lab Sample ID: 400-149575-13

No Detections.

Client Sample ID: AY03298 MW-14S

Lab Sample ID: 400-149575-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03299 MW-3

Lab Sample ID: 400-149575-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03300 MW-8 DUP

Lab Sample ID: 400-149575-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.14		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AY03301 FB-2

Lab Sample ID: 400-149575-17

No Detections.

Client Sample ID: AY03302 MW-15

Lab Sample ID: 400-149575-18

No Detections.

Client Sample ID: AY03303 EB-1

Lab Sample ID: 400-149575-19

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Method	Method Description	Protocol	Laboratory
SM 4500 F C	Fluoride	SM	TAL PEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



Sample Summary

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-149575-1	AY03285 MW-2	Water	02/05/18 11:43	02/09/18 14:30
400-149575-2	AY03286 MW-13	Water	02/05/18 12:45	02/09/18 14:30
400-149575-3	AY03287 MW-13 DUP	Water	02/05/18 12:45	02/09/18 14:30
400-149575-4	AY03288 MW-1	Water	02/05/18 14:14	02/09/18 14:30
400-149575-5	AY03289 MW-12	Water	02/05/18 15:35	02/09/18 14:30
400-149575-6	AY03290 MW-5	Water	02/06/18 09:03	02/09/18 14:30
400-149575-7	AY03291 FB-1	Water	02/06/18 08:46	02/09/18 14:30
400-149575-8	AY03292 MW-6	Water	02/06/18 10:21	02/09/18 14:30
400-149575-9	AY03293 MW-7	Water	02/06/18 11:21	02/09/18 14:30
400-149575-10	AY03294 MW-8	Water	02/06/18 12:21	02/09/18 14:30
400-149575-11	AY03295 MW-9	Water	02/06/18 13:39	02/09/18 14:30
400-149575-12	AY03296 MW-10	Water	02/06/18 14:25	02/09/18 14:30
400-149575-13	AY03297 MW-11	Water	02/06/18 15:31	02/09/18 14:30
400-149575-14	AY03298 MW-14S	Water	02/06/18 16:14	02/09/18 14:30
400-149575-15	AY03299 MW-3	Water	02/06/18 17:48	02/09/18 14:30
400-149575-16	AY03300 MW-8 DUP	Water	02/06/18 12:21	02/09/18 14:30
400-149575-17	AY03301 FB-2	Water	02/06/18 17:22	02/09/18 14:30
400-149575-18	AY03302 MW-15	Water	02/07/18 14:36	02/09/18 14:30
400-149575-19	AY03303 EB-1	Water	02/07/18 14:57	02/09/18 14:30

Client Sample Results

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

TestAmerica Job ID: 400-149575-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03285 MW-2

Lab Sample ID: 400-149575-1

Date Collected: 02/05/18 11:43

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.040	J	0.10	0.032	mg/L	-		02/15/18 12:44	1

Client Sample ID: AY03286 MW-13

Lab Sample ID: 400-149575-2

Date Collected: 02/05/18 12:45

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.040	J	0.10	0.032	mg/L	-		02/15/18 12:47	1

Client Sample ID: AY03287 MW-13 DUP

Lab Sample ID: 400-149575-3

Date Collected: 02/05/18 12:45

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.040	J	0.10	0.032	mg/L	-		02/15/18 12:50	1

Client Sample ID: AY03288 MW-1

Lab Sample ID: 400-149575-4

Date Collected: 02/05/18 14:14

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.37		0.10	0.032	mg/L	-		02/15/18 12:52	1

Client Sample ID: AY03289 MW-12

Lab Sample ID: 400-149575-5

Date Collected: 02/05/18 15:35

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.080	J	0.10	0.032	mg/L	-		02/15/18 12:55	1

Client Sample ID: AY03290 MW-5

Lab Sample ID: 400-149575-6

Date Collected: 02/06/18 09:03

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L	-		02/15/18 12:58	1

Client Sample ID: AY03291 FB-1

Lab Sample ID: 400-149575-7

Date Collected: 02/06/18 08:46

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L	-		02/15/18 13:02	1

Client Sample Results

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03292 MW-6

Lab Sample ID: 400-149575-8

Date Collected: 02/06/18 10:21

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/18 13:25	1

Client Sample ID: AY03293 MW-7

Lab Sample ID: 400-149575-9

Date Collected: 02/06/18 11:21

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.080	J	0.10	0.032	mg/L			02/15/18 13:32	1

Client Sample ID: AY03294 MW-8

Lab Sample ID: 400-149575-10

Date Collected: 02/06/18 12:21

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.15		0.10	0.032	mg/L			02/15/18 12:36	1

Client Sample ID: AY03295 MW-9

Lab Sample ID: 400-149575-11

Date Collected: 02/06/18 13:39

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.040	J	0.10	0.032	mg/L			02/15/18 13:35	1

Client Sample ID: AY03296 MW-10

Lab Sample ID: 400-149575-12

Date Collected: 02/06/18 14:25

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/18 13:38	1

Client Sample ID: AY03297 MW-11

Lab Sample ID: 400-149575-13

Date Collected: 02/06/18 15:31

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/18 13:40	1

Client Sample ID: AY03298 MW-14S

Lab Sample ID: 400-149575-14

Date Collected: 02/06/18 16:14

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.060	J	0.10	0.032	mg/L			02/15/18 13:43	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03299 MW-3

Lab Sample ID: 400-149575-15

Date Collected: 02/06/18 17:48

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.060	J	0.10	0.032	mg/L			02/15/18 13:45	1

Client Sample ID: AY03300 MW-8 DUP

Lab Sample ID: 400-149575-16

Date Collected: 02/06/18 12:21

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.14		0.10	0.032	mg/L			02/15/18 13:48	1

Client Sample ID: AY03301 FB-2

Lab Sample ID: 400-149575-17

Date Collected: 02/06/18 17:22

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/18 13:52	1

Client Sample ID: AY03302 MW-15

Lab Sample ID: 400-149575-18

Date Collected: 02/07/18 14:36

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/18 14:32	1

Client Sample ID: AY03303 EB-1

Lab Sample ID: 400-149575-19

Date Collected: 02/07/18 14:57

Matrix: Water

Date Received: 02/09/18 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/18 14:21	1

Definitions/Glossary

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03285 MW-2

Date Collected: 02/05/18 11:43

Date Received: 02/09/18 14:30

Lab Sample ID: 400-149575-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 12:44	BAB	TAL PEN

Client Sample ID: AY03286 MW-13

Date Collected: 02/05/18 12:45

Date Received: 02/09/18 14:30

Lab Sample ID: 400-149575-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 12:47	BAB	TAL PEN

Client Sample ID: AY03287 MW-13 DUP

Date Collected: 02/05/18 12:45

Date Received: 02/09/18 14:30

Lab Sample ID: 400-149575-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 12:50	BAB	TAL PEN

Client Sample ID: AY03288 MW-1

Date Collected: 02/05/18 14:14

Date Received: 02/09/18 14:30

Lab Sample ID: 400-149575-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 12:52	BAB	TAL PEN

Client Sample ID: AY03289 MW-12

Date Collected: 02/05/18 15:35

Date Received: 02/09/18 14:30

Lab Sample ID: 400-149575-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 12:55	BAB	TAL PEN

Client Sample ID: AY03290 MW-5

Date Collected: 02/06/18 09:03

Date Received: 02/09/18 14:30

Lab Sample ID: 400-149575-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 12:58	BAB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03291 FB-1

Lab Sample ID: 400-149575-7

Date Collected: 02/06/18 08:46

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:02	BAB	TAL PEN

Client Sample ID: AY03292 MW-6

Lab Sample ID: 400-149575-8

Date Collected: 02/06/18 10:21

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:25	BAB	TAL PEN

Client Sample ID: AY03293 MW-7

Lab Sample ID: 400-149575-9

Date Collected: 02/06/18 11:21

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:32	BAB	TAL PEN

Client Sample ID: AY03294 MW-8

Lab Sample ID: 400-149575-10

Date Collected: 02/06/18 12:21

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 12:36	BAB	TAL PEN

Client Sample ID: AY03295 MW-9

Lab Sample ID: 400-149575-11

Date Collected: 02/06/18 13:39

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:35	BAB	TAL PEN

Client Sample ID: AY03296 MW-10

Lab Sample ID: 400-149575-12

Date Collected: 02/06/18 14:25

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:38	BAB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03297 MW-11

Lab Sample ID: 400-149575-13

Date Collected: 02/06/18 15:31

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:40	BAB	TAL PEN

Client Sample ID: AY03298 MW-14S

Lab Sample ID: 400-149575-14

Date Collected: 02/06/18 16:14

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:43	BAB	TAL PEN

Client Sample ID: AY03299 MW-3

Lab Sample ID: 400-149575-15

Date Collected: 02/06/18 17:48

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:45	BAB	TAL PEN

Client Sample ID: AY03300 MW-8 DUP

Lab Sample ID: 400-149575-16

Date Collected: 02/06/18 12:21

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:48	BAB	TAL PEN

Client Sample ID: AY03301 FB-2

Lab Sample ID: 400-149575-17

Date Collected: 02/06/18 17:22

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386695	02/15/18 13:52	BAB	TAL PEN

Client Sample ID: AY03302 MW-15

Lab Sample ID: 400-149575-18

Date Collected: 02/07/18 14:36

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386704	02/15/18 14:32	BAB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03303 EB-1

Lab Sample ID: 400-149575-19

Date Collected: 02/07/18 14:57

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	386704	02/15/18 14:21	BAB	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

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QC Association Summary

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

TestAmerica Job ID: 400-149575-1
SDG: Gaston Gypsum 1134

General Chemistry

Analysis Batch: 386695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-149575-1	AY03285 MW-2	Total/NA	Water	SM 4500 F C	
400-149575-2	AY03286 MW-13	Total/NA	Water	SM 4500 F C	
400-149575-3	AY03287 MW-13 DUP	Total/NA	Water	SM 4500 F C	
400-149575-4	AY03288 MW-1	Total/NA	Water	SM 4500 F C	
400-149575-5	AY03289 MW-12	Total/NA	Water	SM 4500 F C	
400-149575-6	AY03290 MW-5	Total/NA	Water	SM 4500 F C	
400-149575-7	AY03291 FB-1	Total/NA	Water	SM 4500 F C	
400-149575-8	AY03292 MW-6	Total/NA	Water	SM 4500 F C	
400-149575-9	AY03293 MW-7	Total/NA	Water	SM 4500 F C	
400-149575-10	AY03294 MW-8	Total/NA	Water	SM 4500 F C	
400-149575-11	AY03295 MW-9	Total/NA	Water	SM 4500 F C	
400-149575-12	AY03296 MW-10	Total/NA	Water	SM 4500 F C	
400-149575-13	AY03297 MW-11	Total/NA	Water	SM 4500 F C	
400-149575-14	AY03298 MW-14S	Total/NA	Water	SM 4500 F C	
400-149575-15	AY03299 MW-3	Total/NA	Water	SM 4500 F C	
400-149575-16	AY03300 MW-8 DUP	Total/NA	Water	SM 4500 F C	
400-149575-17	AY03301 FB-2	Total/NA	Water	SM 4500 F C	
MB 400-386695/15	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-386695/14	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-149575-10 MS	AY03294 MW-8	Total/NA	Water	SM 4500 F C	
400-149575-10 MSD	AY03294 MW-8	Total/NA	Water	SM 4500 F C	
400-149575-8 DU	AY03292 MW-6	Total/NA	Water	SM 4500 F C	

Analysis Batch: 386704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-149575-18	AY03302 MW-15	Total/NA	Water	SM 4500 F C	
400-149575-19	AY03303 EB-1	Total/NA	Water	SM 4500 F C	
MB 400-386704/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-386704/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-149575-19 MS	AY03303 EB-1	Total/NA	Water	SM 4500 F C	
400-149575-19 MSD	AY03303 EB-1	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

TestAmerica Job ID: 400-149575-1
 SDG: Gaston Gypsum 1134

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-386695/15
Matrix: Water
Analysis Batch: 386695

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/18 12:13	1

Lab Sample ID: LCS 400-386695/14
Matrix: Water
Analysis Batch: 386695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.94		mg/L		99	90 - 110

Lab Sample ID: 400-149575-10 MS
Matrix: Water
Analysis Batch: 386695

Client Sample ID: AY03294 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.15		1.00	1.19		mg/L		104	75 - 125

Lab Sample ID: 400-149575-10 MSD
Matrix: Water
Analysis Batch: 386695

Client Sample ID: AY03294 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.15		1.00	1.19		mg/L		104	75 - 125	0	4

Lab Sample ID: 400-149575-8 DU
Matrix: Water
Analysis Batch: 386695

Client Sample ID: AY03292 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	<0.032		<0.032		mg/L		NC	4

Lab Sample ID: MB 400-386704/3
Matrix: Water
Analysis Batch: 386704

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/18 14:08	1

Lab Sample ID: LCS 400-386704/4
Matrix: Water
Analysis Batch: 386704

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.94		mg/L		99	90 - 110

Lab Sample ID: 400-149575-19 MS
Matrix: Water
Analysis Batch: 386704

Client Sample ID: AY03303 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	1.08		mg/L		108	75 - 125

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QC Sample Results

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

TestAmerica Job ID: 400-149575-1
 SDG: Gaston Gypsum 1134

Lab Sample ID: 400-149575-19 MSD
Matrix: Water
Analysis Batch: 386704

Client Sample ID: AY03303 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	1.04		mg/L		104	75 - 125	4	4

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TestAmerica Pensacola
 3355 McLemore Drive
 Pensacola, FL 32514
 Phone (850) 474-1001 Fax (850) 478-2871

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Chain of Custody Record

Client Information Client Contact: Sarah Copeland Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Callera State, Zip: AL, 35040 Phone: 205-664-6121(Tel) Email: sgcopela@southemco.com Project Name: CCR Site: Gaston Gypsum 1134		Lab Pk: Whittire, Cheyenne R E-Mail: cheyenne.whittire@testamerica.com		Carrier Tracking No(s): COC No: 400-56525-24537.1 Page: Page 1 of 2 Job #: 400-149575	
Due Date Requested: TAT Requested (days): PO #: WO #: Project #: 40007143 CCR SSOW#:		Analysis Requested Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecylsulfate U - Acetone V - MCAA W - ph 4-5 X - EDA Z - other (specify)			
Sample Identification AY03285 AY03286 AY03287 AY03288 AY03289 AY03290 AY03291 AY03292 AY03293 AY03294 AY03295 AY03296 AY03297 AY03298		Sample Date 2/5/18 2/5/18 2/5/18 2/5/18 2/5/18 2/6/18 2/6/18 2/6/18 2/6/18 2/6/18 2/6/18 2/6/18 2/6/18 2/6/18		Sample Time 1143 1245 1245 1414 1535 0903 0846 1021 1121 1221 1339 1425 1531 1614	
Sample Type (C=Comp, G=Grab) G G G G G G G G G G G G G G G G G		Matrix (weeder, Special, Combiroll, etc. (Please, No.)) Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water		Field Filtered Sample (Yes or No) X X X X X X X X X X X X X X X X X	
Form MS/MSD (Yes or No) X X X X X X X X X X X X X X X X X		SM 4500 F, G SM 4500 Cl, E SM 4500 SO4, E		Total Number of Containers 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Special Instructions/Note: MW-2 MW-13 MW-13 Dup (Sample Duplicate) MW-1 MW-12 MW-5 FB-1 (Field Blank) MW-5 MW-7 MW-8 MW-9 MW-10 MW-11 MW-14S		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Method of Shipment: Date/Time: 2/9/18 1430 Company Date/Time: Company Date/Time: Company Cooler Temperature(s) °C and Other Remarks: 19.10 °C JRS			



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

Chain of Custody Record



Client Information Client Contact: Sarah Copeland Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Calera State: AL, ZIP: 35040 Phone: 205-664-6121 (Tel) Email: sccopela@southernco.com Project #: 40007143 CCR Site: Gaston Gypsum 1134		Sampler: Anthony Giggins Lab PM: Whitire, Cheyenne R E-Mail: cheyenne.whitire@testamericainc.com Carrier Tracking No(s): COC No: 400-56525-24537.1 Page: Page 2 of 2 Job #: 400-149575	
Due Date Requested: TAT Requested (days): Routine		Analysis Requested	
Sample Identification AY03299 AY03300 AY03301 AY03302 AY03303	Sample Date 2/6/18 2/6/18 2/6/18 2/7/18 2/7/18	Sample Time (C=Comp, G=Grab) G G G G G	Matrix (Water, Solid, On-site, BT-Trace, A-As) Water Water Water Water Water
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Perform MSMSD (Yes or No) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		SM 4500 F₁ C <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		SM 4500 CL E <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		SM 4500 SO₄ F <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Special Instructions/Note: Total Number of containers: 1 MW-3 1 MW-8 Dup (Sample Duplicate) 1 FB-2 (Field Blank) 1 MW-15 1 EB-1 (Equipment Blank)		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSCA F - MeOH G - Amehlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2SO4 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: Sarah Copeland Date/Time: 2/6/2018, 0930 Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:			
Method of Shipment: _____ Received by: _____ Date/Time: 2/9/18 1430 Received by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Cooler Temperature(s) °C and Other Remarks:			



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-149575-1
SDG Number: Gaston Gypsum 1134

Login Number: 149575

List Number: 1

Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	19.1°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Accreditation/Certification Summary

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

TestAmerica Job ID: 400-149575-1
 SDG: Gaston Gypsum 1134

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-18
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-17 *
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-149577-1

TestAmerica Sample Delivery Group: Gaston Gypsum 1134

Client Project/Site: CCR Plant Gaston

For:

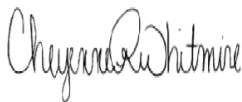
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

3/14/2018 5:26:25 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

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

TestAmerica Job ID: 400-149577-1
SDG: Gaston Gypsum 1134

Job ID: 400-149577-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-149577-1

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-351875: Sample aliquots reduced due to limited sample volume. AY03304 MW-2 (400-149577-1), AY03305 MW-13 (400-149577-2), AY03306 MW-13 DUP (400-149577-3), AY03307 MW-1 (400-149577-4), AY03308 MW-12 (400-149577-5), AY03309 MW-5 (400-149577-6), AY03309 MW-5 (400-149577-6[DU]), AY03310 FB-1 (400-149577-7), AY03311 MW-6 (400-149577-8), AY03312 MW-7 (400-149577-9), AY03313 MW-8 (400-149577-10), AY03314 MW-9 (400-149577-11), AY03315 MW-10 (400-149577-12), AY03316 MW-11 (400-149577-13), AY03317 MW-14S (400-149577-14), AY03318 MW-3 (400-149577-15), AY03319 MW-8 DUP (400-149577-16), AY03320 MW-15 (400-149577-17), AY03321 EB-1 (400-149577-18) and AY03322 FB-2 (400-149577-19)

Method(s) PrecSep-21: Radium 226 Prep Batch 160-351873: Sample aliquots reduced due to limited sample volume. AY03304 MW-2 (400-149577-1), AY03305 MW-13 (400-149577-2), AY03306 MW-13 DUP (400-149577-3), AY03307 MW-1 (400-149577-4), AY03308 MW-12 (400-149577-5), AY03309 MW-5 (400-149577-6), AY03309 MW-5 (400-149577-6[DU]), AY03310 FB-1 (400-149577-7), AY03311 MW-6 (400-149577-8), AY03312 MW-7 (400-149577-9), AY03313 MW-8 (400-149577-10), AY03314 MW-9 (400-149577-11), AY03315 MW-10 (400-149577-12), AY03316 MW-11 (400-149577-13), AY03317 MW-14S (400-149577-14), AY03318 MW-3 (400-149577-15), AY03319 MW-8 DUP (400-149577-16), AY03320 MW-15 (400-149577-17), AY03321 EB-1 (400-149577-18) and AY03322 FB-2 (400-149577-19)

Method Summary

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

TestAmerica Job ID: 400-149577-1
SDG: Gaston Gypsum 1134

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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



Sample Summary

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

TestAmerica Job ID: 400-149577-1
SDG: Gaston Gypsum 1134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-149577-1	AY03304 MW-2	Water	02/05/18 11:43	02/09/18 14:30
400-149577-2	AY03305 MW-13	Water	02/05/18 12:45	02/09/18 14:30
400-149577-3	AY03306 MW-13 DUP	Water	02/05/18 12:45	02/09/18 14:30
400-149577-4	AY03307 MW-1	Water	02/05/18 14:14	02/09/18 14:30
400-149577-5	AY03308 MW-12	Water	02/05/18 15:35	02/09/18 14:30
400-149577-6	AY03309 MW-5	Water	02/06/18 09:03	02/09/18 14:30
400-149577-7	AY03310 FB-1	Water	02/06/18 08:46	02/09/18 14:30
400-149577-8	AY03311 MW-6	Water	02/06/18 10:21	02/09/18 14:30
400-149577-9	AY03312 MW-7	Water	02/06/18 11:21	02/09/18 14:30
400-149577-10	AY03313 MW-8	Water	02/06/18 12:21	02/09/18 14:30
400-149577-11	AY03314 MW-9	Water	02/06/18 13:39	02/09/18 14:30
400-149577-12	AY03315 MW-10	Water	02/06/18 14:25	02/09/18 14:30
400-149577-13	AY03316 MW-11	Water	02/06/18 15:31	02/09/18 14:30
400-149577-14	AY03317 MW-14S	Water	02/06/18 16:14	02/09/18 14:30
400-149577-15	AY03318 MW-3	Water	02/06/18 17:48	02/09/18 14:30
400-149577-16	AY03319 MW-8 DUP	Water	02/06/18 12:21	02/09/18 14:30
400-149577-17	AY03320 MW-15	Water	02/07/18 14:36	02/09/18 14:30
400-149577-18	AY03321 EB-1	Water	02/07/18 14:57	02/09/18 14:30
400-149577-19	AY03322 FB-2	Water	02/06/18 17:22	02/09/18 14:30

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03304 MW-2

Lab Sample ID: 400-149577-1

Date Collected: 02/05/18 11:43

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.118		0.0782	0.0789	1.00	0.101	pCi/L	02/19/18 12:37	03/13/18 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					02/19/18 12:37	03/13/18 08:36	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0874	U	0.313	0.313	1.00	0.544	pCi/L	02/19/18 13:08	02/27/18 14:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					02/19/18 13:08	02/27/18 14:25	1
Y Carrier	83.0		40 - 110					02/19/18 13:08	02/27/18 14:25	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.206	U	0.323	0.323	5.00	0.544	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03305 MW-13

Lab Sample ID: 400-149577-2

Date Collected: 02/05/18 12:45

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0496	U	0.0619	0.0620	1.00	0.102	pCi/L	02/19/18 12:37	03/13/18 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		40 - 110					02/19/18 12:37	03/13/18 08:36	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0858	U	0.256	0.256	1.00	0.480	pCi/L	02/19/18 13:08	02/27/18 14:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		40 - 110					02/19/18 13:08	02/27/18 14:25	1
Y Carrier	82.6		40 - 110					02/19/18 13:08	02/27/18 14:25	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0362	U	0.263	0.263	5.00	0.480	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03306 MW-13 DUP

Lab Sample ID: 400-149577-3

Date Collected: 02/05/18 12:45

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.119		0.0734	0.0742	1.00	0.0886	pCi/L	02/19/18 12:37	03/13/18 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					02/19/18 12:37	03/13/18 08:36	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.389	U	0.306	0.308	1.00	0.482	pCi/L	02/19/18 13:08	02/27/18 14:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					02/19/18 13:08	02/27/18 14:25	1
Y Carrier	82.2		40 - 110					02/19/18 13:08	02/27/18 14:25	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.508		0.315	0.317	5.00	0.482	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03307 MW-1

Lab Sample ID: 400-149577-4

Date Collected: 02/05/18 14:14

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.558		0.136	0.145	1.00	0.0971	pCi/L	02/19/18 12:37	03/13/18 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	108		40 - 110					02/19/18 12:37	03/13/18 08:36	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0374	U	0.295	0.295	1.00	0.517	pCi/L	02/19/18 13:08	02/27/18 14:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	108		40 - 110					02/19/18 13:08	02/27/18 14:25	1
Y Carrier	86.4		40 - 110					02/19/18 13:08	02/27/18 14:25	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.596		0.325	0.329	5.00	0.517	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03308 MW-12

Lab Sample ID: 400-149577-5

Date Collected: 02/05/18 15:35

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0910	U	0.0721	0.0726	1.00	0.101	pCi/L	02/19/18 12:37	03/13/18 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					02/19/18 12:37	03/13/18 08:36	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.230	U	0.341	0.342	1.00	0.573	pCi/L	02/19/18 13:08	02/27/18 14:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					02/19/18 13:08	02/27/18 14:26	1
Y Carrier	80.7		40 - 110					02/19/18 13:08	02/27/18 14:26	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.321	U	0.349	0.350	5.00	0.573	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03309 MW-5

Lab Sample ID: 400-149577-6

Date Collected: 02/06/18 09:03

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.146		0.0821	0.0831	1.00	0.0964	pCi/L	02/19/18 12:37	03/13/18 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					02/19/18 12:37	03/13/18 08:36	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0818	U	0.315	0.315	1.00	0.575	pCi/L	02/19/18 13:08	02/27/18 14:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					02/19/18 13:08	02/27/18 14:26	1
Y Carrier	81.1		40 - 110					02/19/18 13:08	02/27/18 14:26	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0645	U	0.326	0.326	5.00	0.575	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03310 FB-1

Lab Sample ID: 400-149577-7

Date Collected: 02/06/18 08:46

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.166		0.0802	0.0816	1.00	0.0795	pCi/L	02/19/18 12:37	03/13/18 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					02/19/18 12:37	03/13/18 08:32	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.340	U	0.312	0.313	1.00	0.503	pCi/L	02/19/18 13:08	02/27/18 14:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					02/19/18 13:08	02/27/18 14:26	1
Y Carrier	83.7		40 - 110					02/19/18 13:08	02/27/18 14:26	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.506		0.322	0.323	5.00	0.503	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03311 MW-6

Lab Sample ID: 400-149577-8

Date Collected: 02/06/18 10:21

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.000	U	0.0418	0.0418	1.00	0.0931	pCi/L	02/19/18 12:37	03/13/18 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					02/19/18 12:37	03/13/18 08:32	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.140	U	0.279	0.280	1.00	0.523	pCi/L	02/19/18 13:08	02/27/18 14:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					02/19/18 13:08	02/27/18 14:26	1
Y Carrier	84.1		40 - 110					02/19/18 13:08	02/27/18 14:26	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.140	U	0.282	0.283	5.00	0.523	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03312 MW-7

Lab Sample ID: 400-149577-9

Date Collected: 02/06/18 11:21

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0836	U	0.0658	0.0662	1.00	0.0895	pCi/L	02/19/18 12:37	03/13/18 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					02/19/18 12:37	03/13/18 08:32	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0849	U	0.328	0.328	1.00	0.570	pCi/L	02/19/18 13:08	02/27/18 14:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					02/19/18 13:08	02/27/18 14:26	1
Y Carrier	84.9		40 - 110					02/19/18 13:08	02/27/18 14:26	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.168	U	0.335	0.335	5.00	0.570	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03313 MW-8

Lab Sample ID: 400-149577-10

Date Collected: 02/06/18 12:21

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0394	U	0.0493	0.0495	1.00	0.0803	pCi/L	02/19/18 12:37	03/13/18 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					02/19/18 12:37	03/13/18 08:32	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0504	U	0.307	0.307	1.00	0.552	pCi/L	02/19/18 13:08	02/27/18 14:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					02/19/18 13:08	02/27/18 14:26	1
Y Carrier	83.7		40 - 110					02/19/18 13:08	02/27/18 14:26	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0110	U	0.311	0.311	5.00	0.552	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03314 MW-9

Lab Sample ID: 400-149577-11

Date Collected: 02/06/18 13:39

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0281	U	0.0481	0.0482	1.00	0.0860	pCi/L	02/19/18 12:37	03/13/18 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					02/19/18 12:37	03/13/18 08:32	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.300	U	0.329	0.331	1.00	0.540	pCi/L	02/19/18 13:08	02/27/18 14:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					02/19/18 13:08	02/27/18 14:27	1
Y Carrier	84.9		40 - 110					02/19/18 13:08	02/27/18 14:27	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.328	U	0.332	0.334	5.00	0.540	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03315 MW-10

Lab Sample ID: 400-149577-12

Date Collected: 02/06/18 14:25

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0720	U	0.0600	0.0603	1.00	0.0824	pCi/L	02/19/18 12:37	03/13/18 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					02/19/18 12:37	03/13/18 08:32	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.203	U	0.308	0.308	1.00	0.517	pCi/L	02/19/18 13:08	02/27/18 14:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					02/19/18 13:08	02/27/18 14:27	1
Y Carrier	82.6		40 - 110					02/19/18 13:08	02/27/18 14:27	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.275	U	0.314	0.314	5.00	0.517	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03316 MW-11

Lab Sample ID: 400-149577-13

Date Collected: 02/06/18 15:31

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0430	U	0.0535	0.0536	1.00	0.0872	pCi/L	02/19/18 12:37	03/13/18 08:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		40 - 110					02/19/18 12:37	03/13/18 08:32	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.226	U	0.286	0.287	1.00	0.550	pCi/L	02/19/18 13:08	02/27/18 14:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		40 - 110					02/19/18 13:08	02/27/18 14:27	1
Y Carrier	81.5		40 - 110					02/19/18 13:08	02/27/18 14:27	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.183	U	0.291	0.292	5.00	0.550	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03317 MW-14S

Lab Sample ID: 400-149577-14

Date Collected: 02/06/18 16:14

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.193		0.0898	0.0914	1.00	0.0901	pCi/L	02/19/18 12:37	03/13/18 08:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					02/19/18 12:37	03/13/18 08:33	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.114	U	0.296	0.296	1.00	0.512	pCi/L	02/19/18 13:08	02/27/18 14:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					02/19/18 13:08	02/27/18 14:27	1
Y Carrier	81.5		40 - 110					02/19/18 13:08	02/27/18 14:27	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.308	U	0.309	0.310	5.00	0.512	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03318 MW-3

Lab Sample ID: 400-149577-15

Date Collected: 02/06/18 17:48

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.240		0.0984	0.101	1.00	0.0847	pCi/L	02/19/18 12:37	03/13/18 08:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					02/19/18 12:37	03/13/18 08:33	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.129	U	0.281	0.282	1.00	0.527	pCi/L	02/19/18 13:08	02/27/18 14:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					02/19/18 13:08	02/27/18 14:27	1
Y Carrier	83.0		40 - 110					02/19/18 13:08	02/27/18 14:27	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.111	U	0.298	0.300	5.00	0.527	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03319 MW-8 DUP

Lab Sample ID: 400-149577-16

Date Collected: 02/06/18 12:21

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.148		0.0817	0.0828	1.00	0.0910	pCi/L	02/19/18 12:37	03/13/18 08:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					02/19/18 12:37	03/13/18 08:33	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.222	U	0.305	0.305	1.00	0.509	pCi/L	02/19/18 13:08	02/27/18 14:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					02/19/18 13:08	02/27/18 14:27	1
Y Carrier	81.1		40 - 110					02/19/18 13:08	02/27/18 14:27	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.370	U	0.316	0.316	5.00	0.509	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03320 MW-15

Lab Sample ID: 400-149577-17

Date Collected: 02/07/18 14:36

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0657	U	0.0594	0.0596	1.00	0.0848	pCi/L	02/19/18 12:37	03/13/18 08:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					02/19/18 12:37	03/13/18 08:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0217	U	0.253	0.253	1.00	0.453	pCi/L	02/19/18 13:08	02/27/18 14:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					02/19/18 13:08	02/27/18 14:27	1
Y Carrier	84.9		40 - 110					02/19/18 13:08	02/27/18 14:27	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0874	U	0.260	0.260	5.00	0.453	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03321 EB-1

Lab Sample ID: 400-149577-18

Date Collected: 02/07/18 14:57

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0162	U	0.0384	0.0384	1.00	0.102	pCi/L	02/19/18 12:37	03/13/18 08:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					02/19/18 12:37	03/13/18 08:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.190	U	0.285	0.285	1.00	0.478	pCi/L	02/19/18 13:08	02/27/18 14:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					02/19/18 13:08	02/27/18 14:27	1
Y Carrier	86.0		40 - 110					02/19/18 13:08	02/27/18 14:27	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.174	U	0.288	0.288	5.00	0.478	pCi/L		03/14/18 15:36	1

Client Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03322 FB-2

Lab Sample ID: 400-149577-19

Date Collected: 02/06/18 17:22

Matrix: Water

Date Received: 02/09/18 14:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0318	U	0.0427	0.0428	1.00	0.116	pCi/L	02/19/18 12:37	03/13/18 08:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					02/19/18 12:37	03/13/18 08:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.110	U	0.238	0.239	1.00	0.449	pCi/L	02/19/18 13:08	02/27/18 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					02/19/18 13:08	02/27/18 14:28	1
Y Carrier	87.5		40 - 110					02/19/18 13:08	02/27/18 14:28	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.142	U	0.242	0.243	5.00	0.449	pCi/L		03/14/18 15:36	1

Definitions/Glossary

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

TestAmerica Job ID: 400-149577-1
SDG: Gaston Gypsum 1134

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-149577-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03304 MW-2

Lab Sample ID: 400-149577-1

Date Collected: 02/05/18 11:43

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355285	03/13/18 08:36	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:25	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03305 MW-13

Lab Sample ID: 400-149577-2

Date Collected: 02/05/18 12:45

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355285	03/13/18 08:36	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:25	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03306 MW-13 DUP

Lab Sample ID: 400-149577-3

Date Collected: 02/05/18 12:45

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355285	03/13/18 08:36	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:25	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03307 MW-1

Lab Sample ID: 400-149577-4

Date Collected: 02/05/18 14:14

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355285	03/13/18 08:36	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:25	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-149577-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03308 MW-12

Lab Sample ID: 400-149577-5

Date Collected: 02/05/18 15:35

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355285	03/13/18 08:36	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03309 MW-5

Lab Sample ID: 400-149577-6

Date Collected: 02/06/18 09:03

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355285	03/13/18 08:36	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03310 FB-1

Lab Sample ID: 400-149577-7

Date Collected: 02/06/18 08:46

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:32	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03311 MW-6

Lab Sample ID: 400-149577-8

Date Collected: 02/06/18 10:21

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:32	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03312 MW-7

Lab Sample ID: 400-149577-9

Date Collected: 02/06/18 11:21

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:32	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03313 MW-8

Lab Sample ID: 400-149577-10

Date Collected: 02/06/18 12:21

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:32	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03314 MW-9

Lab Sample ID: 400-149577-11

Date Collected: 02/06/18 13:39

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:32	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03315 MW-10

Lab Sample ID: 400-149577-12

Date Collected: 02/06/18 14:25

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:32	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-149577-1
SDG: Gaston Gypsum 1134

Client Sample ID: AY03316 MW-11

Lab Sample ID: 400-149577-13

Date Collected: 02/06/18 15:31

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:32	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03317 MW-14S

Lab Sample ID: 400-149577-14

Date Collected: 02/06/18 16:14

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:33	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03318 MW-3

Lab Sample ID: 400-149577-15

Date Collected: 02/06/18 17:48

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:33	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03319 MW-8 DUP

Lab Sample ID: 400-149577-16

Date Collected: 02/06/18 12:21

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:33	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Client Sample ID: AY03320 MW-15

Lab Sample ID: 400-149577-17

Date Collected: 02/07/18 14:36

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355287	03/13/18 08:52	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03321 EB-1

Lab Sample ID: 400-149577-18

Date Collected: 02/07/18 14:57

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355289	03/13/18 08:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353074	02/27/18 14:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Client Sample ID: AY03322 FB-2

Lab Sample ID: 400-149577-19

Date Collected: 02/06/18 17:22

Matrix: Water

Date Received: 02/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			351873	02/19/18 12:37	TJT	TAL SL
Total/NA	Analysis	9315		1	355289	03/13/18 08:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			351875	02/19/18 13:08	TJT	TAL SL
Total/NA	Analysis	9320		1	353076	02/27/18 14:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	355683	03/14/18 15:36	RTM	TAL SL

Laboratory References:

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

QC Association Summary

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Rad

Prep Batch: 351873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-149577-1	AY03304 MW-2	Total/NA	Water	PrecSep-21	
400-149577-2	AY03305 MW-13	Total/NA	Water	PrecSep-21	
400-149577-3	AY03306 MW-13 DUP	Total/NA	Water	PrecSep-21	
400-149577-4	AY03307 MW-1	Total/NA	Water	PrecSep-21	
400-149577-5	AY03308 MW-12	Total/NA	Water	PrecSep-21	
400-149577-6	AY03309 MW-5	Total/NA	Water	PrecSep-21	
400-149577-7	AY03310 FB-1	Total/NA	Water	PrecSep-21	
400-149577-8	AY03311 MW-6	Total/NA	Water	PrecSep-21	
400-149577-9	AY03312 MW-7	Total/NA	Water	PrecSep-21	
400-149577-10	AY03313 MW-8	Total/NA	Water	PrecSep-21	
400-149577-11	AY03314 MW-9	Total/NA	Water	PrecSep-21	
400-149577-12	AY03315 MW-10	Total/NA	Water	PrecSep-21	
400-149577-13	AY03316 MW-11	Total/NA	Water	PrecSep-21	
400-149577-14	AY03317 MW-14S	Total/NA	Water	PrecSep-21	
400-149577-15	AY03318 MW-3	Total/NA	Water	PrecSep-21	
400-149577-16	AY03319 MW-8 DUP	Total/NA	Water	PrecSep-21	
400-149577-17	AY03320 MW-15	Total/NA	Water	PrecSep-21	
400-149577-18	AY03321 EB-1	Total/NA	Water	PrecSep-21	
400-149577-19	AY03322 FB-2	Total/NA	Water	PrecSep-21	
MB 160-351873/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-351873/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-149577-6 DU	AY03309 MW-5	Total/NA	Water	PrecSep-21	

Prep Batch: 351875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-149577-1	AY03304 MW-2	Total/NA	Water	PrecSep_0	
400-149577-2	AY03305 MW-13	Total/NA	Water	PrecSep_0	
400-149577-3	AY03306 MW-13 DUP	Total/NA	Water	PrecSep_0	
400-149577-4	AY03307 MW-1	Total/NA	Water	PrecSep_0	
400-149577-5	AY03308 MW-12	Total/NA	Water	PrecSep_0	
400-149577-6	AY03309 MW-5	Total/NA	Water	PrecSep_0	
400-149577-7	AY03310 FB-1	Total/NA	Water	PrecSep_0	
400-149577-8	AY03311 MW-6	Total/NA	Water	PrecSep_0	
400-149577-9	AY03312 MW-7	Total/NA	Water	PrecSep_0	
400-149577-10	AY03313 MW-8	Total/NA	Water	PrecSep_0	
400-149577-11	AY03314 MW-9	Total/NA	Water	PrecSep_0	
400-149577-12	AY03315 MW-10	Total/NA	Water	PrecSep_0	
400-149577-13	AY03316 MW-11	Total/NA	Water	PrecSep_0	
400-149577-14	AY03317 MW-14S	Total/NA	Water	PrecSep_0	
400-149577-15	AY03318 MW-3	Total/NA	Water	PrecSep_0	
400-149577-16	AY03319 MW-8 DUP	Total/NA	Water	PrecSep_0	
400-149577-17	AY03320 MW-15	Total/NA	Water	PrecSep_0	
400-149577-18	AY03321 EB-1	Total/NA	Water	PrecSep_0	
400-149577-19	AY03322 FB-2	Total/NA	Water	PrecSep_0	
MB 160-351875/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-351875/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-149577-6 DU	AY03309 MW-5	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-351873/1-A
Matrix: Water
Analysis Batch: 355285

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351873

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03152	U	0.0512	0.0513	1.00	0.0901	pCi/L	02/19/18 12:37	03/13/18 08:36	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					02/19/18 12:37	03/13/18 08:36	1

Lab Sample ID: LCS 160-351873/2-A
Matrix: Water
Analysis Batch: 355285

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351873

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	15.7	14.75		1.50	1.00	0.0965	pCi/L	94	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	98.8		40 - 110						

Lab Sample ID: 400-149577-6 DU
Matrix: Water
Analysis Batch: 355285

Client Sample ID: AY03309 MW-5
Prep Type: Total/NA
Prep Batch: 351873

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.146		0.02158	U	0.0595	1.00	0.113	pCi/L	0.87	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	94.1		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-351875/1-A
Matrix: Water
Analysis Batch: 353074

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351875

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.01733	U	0.274	0.274	1.00	0.498	pCi/L	02/19/18 13:08	02/27/18 14:25	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					02/19/18 13:08	02/27/18 14:25	1
Y Carrier	83.0		40 - 110					02/19/18 13:08	02/27/18 14:25	1

QC Sample Results

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

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

Lab Sample ID: LCS 160-351875/2-A
Matrix: Water
Analysis Batch: 353074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351875

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	11.4	12.92		1.49	1.00	0.495	pCi/L	114	56 - 140
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	98.8		40 - 110						
Y Carrier	84.1		40 - 110						

Lab Sample ID: 400-149577-6 DU
Matrix: Water
Analysis Batch: 353074

Client Sample ID: AY03309 MW-5
Prep Type: Total/NA
Prep Batch: 351875

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	-0.0818	U	0.2845	U	0.322	1.00	0.527	pCi/L	0.57	1
DU DU										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	94.1		40 - 110							
Y Carrier	83.7		40 - 110							

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Lab Sample ID: 400-149577-6 DU
Matrix: Water
Analysis Batch: 355683

Client Sample ID: AY03309 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	0.0645	U	0.3061	U	0.327	5.00	0.527	pCi/L	0.37	

Chain of Custody Record

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

Client Information
 Company: Alabama Power General Test Laboratory
 Address: 744 County Rd 87 GSC #8
 City: Callera
 State, Zip: AL, 35040
 Phone: 205-664-6121 (Tel)
 Email: sgcopela@southernco.com
 Project Name: CCR
 Site: Gaston Gypsum 1134

Lab P/N: Whitmire, Cheyenne R.
 E-Mail: cheyenne.whitmire@testamericainc.com

Carrier Tracking No(s):
 COC No: 400-56525-24537.1
 Page: Page 1 of 2
 Job #: 400-149577

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Water, Soils, Sediment, Composites, etc)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of Containers	Special Instructions/Note:
AY03304	2/5/18	1143	G	Water	X	X	916, Ra226, 9320, Ra228, Ra226Ra228, GFC	1	MW-2
AY03305	2/5/18	1245	G	Water	X	X		1	MW-13
AY03306	2/5/18	1245	G	Water	X	X		1	MW-13 Dup (Sample Duplicate)
AY03307	2/5/18	1414	G	Water	X	X		1	MW-1
AY03308	2/5/18	1535	G	Water	X	X		1	MW-12
AY03309	2/6/18	0903	G	Water	Y	X		3	MW-5
AY03310	2/6/18	0846	G	Water	X	X		1	FB-1 (Field Blank)
AY03311	2/6/18	1021	G	Water	X	X		1	MW-6
AY03312	2/6/18	1121	G	Water	X	X		1	MW-7
AY03313	2/6/18	1221	G	Water	X	X		1	MW-8
AY03314	2/6/18	1339	G	Water	X	X		1	MW-9
AY03315	2/6/18	1425	G	Water	X	X		1	MW-10
AY03316	2/6/18	1531	G	Water	X	X		1	MW-11
AY03317	2/6/18	1614	G	Water	X	X		1	MW-14S
AY03318	2/6/18	1748	G	Water	X	X		1	MW-3

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Sarah Copeland
 Date: 2/6/18 09:40
 Relinquished by: Sarah Copeland
 Date/Time: 2/6/18 09:40

Relinquished by: _____
 Date/Time: _____

Relinquished by: _____
 Date/Time: _____

Custody Seals Intact: Yes No
 Custody Seal No.: _____

Method of Shipment: _____
 Date/Time: 2/6/18 14:35
 Received by: _____
 Date/Time: _____

Company: APC
 Company: _____
 Company: _____



TestAmerica Pensacola
 3355 McLemore Drive
 Pensacola, FL 32514
 Phone (850) 474-1001 Fax (850) 478-2871

Chain of Custody Record



Client Information		Sampler: Anthony Goggins		Lab P/N: Whitire, Cheyenne R		Carrier Tracking No(s):	
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitire@testamericainc.com		COC No: 400-56525-24537.1	
Company: Alabama Power General Test Laboratory		Due Date Requested:		Analysis Requested		Page: 2 of 2	
Address: 744 County Rd 87 GSC #8		TAT Requested (days): Routine		Perform MS/MSD (Yes or No)		Job #: 400-149577	
City: Callera		PO #:		Hold Filtered Sample (Yes or No)		Preservation Codes:	
State, Zip: AL, 35040		WO #:		Matrix (Water, Solid, Other)		A-HCL, M-Hexane	
Phone: 205-664-6121 (Tel)		Project #:		Sample Type (C=comp, G=grab)		B-NaOH, N-None	
Email: sgcoppela@southernco.com		SSOW#: 40007143		Sample Date		C-Zn Acetate, O-ArNaO2	
Project Name: CCR		Sample Time		Sample Date		D-Nitric Acid, P-Na2O48	
Site: Gaston Gypsum 1134		Preservation Code:		Sample Date		E-NaHSO4, R-Na2S2O3	
Sample Identification		Sample Date		Sample Time		F-MeOH, S-H2SO4	
AY03319	2/6/18	1221	G	Water		G-Amchlor, H-Ascorbic Acid	
AY03320	2/7/18	1436	G	Water		I-Ice, J-DI Water	
AY03321	2/7/18	1457	G	Water		K-EDTA, V-MCAA	
AY03322	2/6/18	1722	G	Water		L-EDA, W-ph 4-5	
						Z-other (specify)	
						Other:	
						Special Instructions/Notes:	
						1 MW-8 Dup (Sample Duplicate)	
						1 MW-15	
						1 EB-1 (Equipment Blank)	
						1 FB-2 (Field Blank)	
						Total Number of Containers	
						9316, Ra226, 9320, Ra229, Ra229a, Ra229a228, GPPC	
						D	
						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
						Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
						Special Instructions/QC Requirements:	
						Method of Shipment:	
						Received by: _____ Company	
						Date/Time: _____	
						Received by: _____ Company	
						Date/Time: _____	
						Received by: _____ Company	
						Date/Time: _____	
						Cooler Temperature(s) °C and Other Remarks:	
						Custody Seal No.: <input type="checkbox"/> Yes <input type="checkbox"/> No	



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-149577-1
SDG Number: Gaston Gypsum 1134

Login Number: 149577

List Number: 1

Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	25.5°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-149577-1
SDG Number: Gaston Gypsum 1134

Login Number: 149577
List Number: 2
Creator: Taylor, Kristene N

List Source: TestAmerica St. Louis
List Creation: 02/16/18 04:10 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	17.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-149577-1
 SDG: Gaston Gypsum 1134

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-18
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-18
Arizona	State Program	9	AZ0813	12-08-18
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-18
Illinois	NELAP	5	200023	11-30-18
Iowa	State Program	7	373	12-01-18
Kansas	NELAP	7	E-10236	10-31-18
Kentucky (DW)	State Program	4	90125	12-31-18
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-18
Louisiana (DW)	NELAP	6	LA180017	12-31-18
Maryland	State Program	3	310	09-30-18
Missouri	State Program	7	780	06-30-18
Nevada	State Program	9	MO000542018-1	07-31-18
New Jersey	NELAP	2	MO002	06-30-18

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-149577-1
SDG: Gaston Gypsum 1134

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11616	03-31-18 *
North Dakota	State Program	8	R207	06-30-18
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-18
Pennsylvania	NELAP	3	68-00540	02-28-19
South Carolina	State Program	4	85002001	06-30-18
Texas	NELAP	6	T104704193-17-11	07-31-18
US Fish & Wildlife	Federal		058448	08-31-18
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-18
Virginia	NELAP	3	460230	06-14-18
Washington	State Program	10	C592	08-30-18
West Virginia DEP	State Program	3	381	08-31-18

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

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-1	2/5/2018 13:57	336	uS/cm	Conductivity
GN-GSA-MW-1	2/5/2018 13:57	24.41	ft	Depth to Water Detail
GN-GSA-MW-1	2/5/2018 13:57	0.14	mg/L	DO
GN-GSA-MW-1	2/5/2018 13:57	-155.1	mv	Oxidation Reduction Potention
GN-GSA-MW-1	2/5/2018 13:57	7.75	pH	pH
GN-GSA-MW-1	2/5/2018 13:57	19.68	C	Temperature
GN-GSA-MW-1	2/5/2018 13:57	1.14	NTU	Turbidity
GN-GSA-MW-1	2/5/2018 14:02	333.5	uS/cm	Conductivity
GN-GSA-MW-1	2/5/2018 14:02	24.54	ft	Depth to Water Detail
GN-GSA-MW-1	2/5/2018 14:02	0.12	mg/L	DO
GN-GSA-MW-1	2/5/2018 14:02	-157.5	mv	Oxidation Reduction Potention
GN-GSA-MW-1	2/5/2018 14:02	7.77	pH	pH
GN-GSA-MW-1	2/5/2018 14:02	19.77	C	Temperature
GN-GSA-MW-1	2/5/2018 14:02	0.72	NTU	Turbidity
GN-GSA-MW-1	2/5/2018 14:07	334.6	uS/cm	Conductivity
GN-GSA-MW-1	2/5/2018 14:07	24.57	ft	Depth to Water Detail
GN-GSA-MW-1	2/5/2018 14:07	0.11	mg/L	DO
GN-GSA-MW-1	2/5/2018 14:07	-156.1	mv	Oxidation Reduction Potention
GN-GSA-MW-1	2/5/2018 14:07	7.78	pH	pH
GN-GSA-MW-1	2/5/2018 14:07	19.85	C	Temperature
GN-GSA-MW-1	2/5/2018 14:07	0.49	NTU	Turbidity
GN-GSA-MW-1	2/5/2018 14:12	337.2	uS/cm	Conductivity
GN-GSA-MW-1	2/5/2018 14:12	24.63	ft	Depth to Water Detail
GN-GSA-MW-1	2/5/2018 14:12	0.1	mg/L	DO
GN-GSA-MW-1	2/5/2018 14:12	-152.4	mv	Oxidation Reduction Potention
GN-GSA-MW-1	2/5/2018 14:12	7.78	pH	pH
GN-GSA-MW-1	2/5/2018 14:12	19.86	C	Temperature
GN-GSA-MW-1	2/5/2018 14:12	0.45	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-2	2/5/2018 11:27	520	uS/cm	Conductivity
GN-GSA-MW-2	2/5/2018 11:27	23.13	ft	Depth to Water Detail
GN-GSA-MW-2	2/5/2018 11:27	1.25	mg/L	DO
GN-GSA-MW-2	2/5/2018 11:27	35.9	mv	Oxidation Reduction Potention
GN-GSA-MW-2	2/5/2018 11:27	7.11	pH	pH
GN-GSA-MW-2	2/5/2018 11:27	17.81	C	Temperature
GN-GSA-MW-2	2/5/2018 11:27	5.12	NTU	Turbidity
GN-GSA-MW-2	2/5/2018 11:32	515.2	uS/cm	Conductivity
GN-GSA-MW-2	2/5/2018 11:32	23.16	ft	Depth to Water Detail
GN-GSA-MW-2	2/5/2018 11:32	1.38	mg/L	DO
GN-GSA-MW-2	2/5/2018 11:32	48.8	mv	Oxidation Reduction Potention
GN-GSA-MW-2	2/5/2018 11:32	7.12	pH	pH
GN-GSA-MW-2	2/5/2018 11:32	17.8	C	Temperature
GN-GSA-MW-2	2/5/2018 11:32	1.25	NTU	Turbidity
GN-GSA-MW-2	2/5/2018 11:37	517.9	uS/cm	Conductivity
GN-GSA-MW-2	2/5/2018 11:37	23.23	ft	Depth to Water Detail
GN-GSA-MW-2	2/5/2018 11:37	1.43	mg/L	DO
GN-GSA-MW-2	2/5/2018 11:37	56.8	mv	Oxidation Reduction Potention
GN-GSA-MW-2	2/5/2018 11:37	7.12	pH	pH
GN-GSA-MW-2	2/5/2018 11:37	17.76	C	Temperature
GN-GSA-MW-2	2/5/2018 11:37	0.91	NTU	Turbidity
GN-GSA-MW-2	2/5/2018 11:42	522.1	uS/cm	Conductivity
GN-GSA-MW-2	2/5/2018 11:42	23.31	ft	Depth to Water Detail
GN-GSA-MW-2	2/5/2018 11:42	1.45	mg/L	DO
GN-GSA-MW-2	2/5/2018 11:42	61.1	mv	Oxidation Reduction Potention
GN-GSA-MW-2	2/5/2018 11:42	7.12	pH	pH
GN-GSA-MW-2	2/5/2018 11:42	17.77	C	Temperature
GN-GSA-MW-2	2/5/2018 11:42	0.85	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-3	2/6/2018 16:41	495.5	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 16:41	24.24	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 16:41	0.85	mg/L	DO
GN-GSA-MW-3	2/6/2018 16:41	66.7	mv	Oxidation Reduction Potention
GN-GSA-MW-3	2/6/2018 16:41	7.07	pH	pH
GN-GSA-MW-3	2/6/2018 16:41	20.04	C	Temperature
GN-GSA-MW-3	2/6/2018 16:41	0.59	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 16:46	499.5	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 16:46	24.71	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 16:46	0.62	mg/L	DO
GN-GSA-MW-3	2/6/2018 16:46	72.3	mv	Oxidation Reduction Potention
GN-GSA-MW-3	2/6/2018 16:46	7.04	pH	pH
GN-GSA-MW-3	2/6/2018 16:46	19.75	C	Temperature
GN-GSA-MW-3	2/6/2018 16:46	0.51	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 16:51	500.1	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 16:51	25.15	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 16:51	0.54	mg/L	DO
GN-GSA-MW-3	2/6/2018 16:51	74.4	mv	Oxidation Reduction Potention
GN-GSA-MW-3	2/6/2018 16:51	7.03	pH	pH
GN-GSA-MW-3	2/6/2018 16:51	19.59	C	Temperature
GN-GSA-MW-3	2/6/2018 16:51	0.39	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 16:56	500.8	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 16:56	25.55	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 16:56	0.52	mg/L	DO
GN-GSA-MW-3	2/6/2018 16:56	74.7	mv	Oxidation Reduction Potention
GN-GSA-MW-3	2/6/2018 16:56	7.03	pH	pH
GN-GSA-MW-3	2/6/2018 16:56	19.5	C	Temperature
GN-GSA-MW-3	2/6/2018 16:56	0.47	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:01	500.6	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:01	25.87	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:01	0.49	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:01	74.2	mv	Oxidation Reduction Potention
GN-GSA-MW-3	2/6/2018 17:01	7.03	pH	pH
GN-GSA-MW-3	2/6/2018 17:01	19.41	C	Temperature
GN-GSA-MW-3	2/6/2018 17:01	0.49	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:06	502.3	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:06	26.11	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:06	0.45	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:06	73.6	mv	Oxidation Reduction Potention
GN-GSA-MW-3	2/6/2018 17:06	7.02	pH	pH
GN-GSA-MW-3	2/6/2018 17:06	19.33	C	Temperature
GN-GSA-MW-3	2/6/2018 17:06	0.45	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:11	504.2	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:11	26.41	ft	Depth to Water Detail

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-3	2/6/2018 17:11	0.42	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:11	73.1	mv	Oxidation Reduction Potential
GN-GSA-MW-3	2/6/2018 17:11	7.02	pH	pH
GN-GSA-MW-3	2/6/2018 17:11	19.33	C	Temperature
GN-GSA-MW-3	2/6/2018 17:11	0.82	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:16	503.1	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:16	26.56	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:16	0.44	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:16	72.9	mv	Oxidation Reduction Potential
GN-GSA-MW-3	2/6/2018 17:16	7.01	pH	pH
GN-GSA-MW-3	2/6/2018 17:16	19.29	C	Temperature
GN-GSA-MW-3	2/6/2018 17:16	0.78	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:21	499.2	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:21	26.71	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:21	0.49	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:21	73.1	mv	Oxidation Reduction Potential
GN-GSA-MW-3	2/6/2018 17:21	6.99	pH	pH
GN-GSA-MW-3	2/6/2018 17:21	19.28	C	Temperature
GN-GSA-MW-3	2/6/2018 17:21	0.73	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:26	494.7	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:26	26.88	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:26	0.56	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:26	73.5	mv	Oxidation Reduction Potential
GN-GSA-MW-3	2/6/2018 17:26	6.97	pH	pH
GN-GSA-MW-3	2/6/2018 17:26	19.15	C	Temperature
GN-GSA-MW-3	2/6/2018 17:26	0.84	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:31	493.3	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:31	27.04	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:31	0.6	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:31	73.4	mv	Oxidation Reduction Potential
GN-GSA-MW-3	2/6/2018 17:31	6.96	pH	pH
GN-GSA-MW-3	2/6/2018 17:31	18.97	C	Temperature
GN-GSA-MW-3	2/6/2018 17:31	0.94	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:36	495	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:36	27.2	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:36	0.61	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:36	72.9	mv	Oxidation Reduction Potential
GN-GSA-MW-3	2/6/2018 17:36	6.96	pH	pH
GN-GSA-MW-3	2/6/2018 17:36	18.86	C	Temperature
GN-GSA-MW-3	2/6/2018 17:36	1.04	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:41	495.5	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:41	27.37	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:41	0.63	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:41	72.2	mv	Oxidation Reduction Potential

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-3	2/6/2018 17:41	6.96	pH	pH
GN-GSA-MW-3	2/6/2018 17:41	18.75	C	Temperature
GN-GSA-MW-3	2/6/2018 17:41	1.16	NTU	Turbidity
GN-GSA-MW-3	2/6/2018 17:46	495.7	uS/cm	Conductivity
GN-GSA-MW-3	2/6/2018 17:46	27.43	ft	Depth to Water Detail
GN-GSA-MW-3	2/6/2018 17:46	0.65	mg/L	DO
GN-GSA-MW-3	2/6/2018 17:46	71.7	mv	Oxidation Reduction Potention
GN-GSA-MW-3	2/6/2018 17:46	6.96	pH	pH
GN-GSA-MW-3	2/6/2018 17:46	18.78	C	Temperature
GN-GSA-MW-3	2/6/2018 17:46	1.09	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-5	2/6/2018 8:42	457.7	uS/cm	Conductivity
GN-GSA-MW-5	2/6/2018 8:42	29.05	ft	Depth to Water Detail
GN-GSA-MW-5	2/6/2018 8:42	0.22	mg/L	DO
GN-GSA-MW-5	2/6/2018 8:42	7.2	mv	Oxidation Reduction Potention
GN-GSA-MW-5	2/6/2018 8:42	6.41	pH	pH
GN-GSA-MW-5	2/6/2018 8:42	18.3	C	Temperature
GN-GSA-MW-5	2/6/2018 8:42	20.5	NTU	Turbidity
GN-GSA-MW-5	2/6/2018 8:47	433.1	uS/cm	Conductivity
GN-GSA-MW-5	2/6/2018 8:47	29.05	ft	Depth to Water Detail
GN-GSA-MW-5	2/6/2018 8:47	0.18	mg/L	DO
GN-GSA-MW-5	2/6/2018 8:47	15.4	mv	Oxidation Reduction Potention
GN-GSA-MW-5	2/6/2018 8:47	6.38	pH	pH
GN-GSA-MW-5	2/6/2018 8:47	18.26	C	Temperature
GN-GSA-MW-5	2/6/2018 8:47	10.44	NTU	Turbidity
GN-GSA-MW-5	2/6/2018 8:52	422.4	uS/cm	Conductivity
GN-GSA-MW-5	2/6/2018 8:52	29.05	ft	Depth to Water Detail
GN-GSA-MW-5	2/6/2018 8:52	0.16	mg/L	DO
GN-GSA-MW-5	2/6/2018 8:52	19.9	mv	Oxidation Reduction Potention
GN-GSA-MW-5	2/6/2018 8:52	6.38	pH	pH
GN-GSA-MW-5	2/6/2018 8:52	18.13	C	Temperature
GN-GSA-MW-5	2/6/2018 8:52	6.49	NTU	Turbidity
GN-GSA-MW-5	2/6/2018 8:57	416.1	uS/cm	Conductivity
GN-GSA-MW-5	2/6/2018 8:57	29.05	ft	Depth to Water Detail
GN-GSA-MW-5	2/6/2018 8:57	0.15	mg/L	DO
GN-GSA-MW-5	2/6/2018 8:57	22.9	mv	Oxidation Reduction Potention
GN-GSA-MW-5	2/6/2018 8:57	6.37	pH	pH
GN-GSA-MW-5	2/6/2018 8:57	18.1	C	Temperature
GN-GSA-MW-5	2/6/2018 8:57	4.1	NTU	Turbidity
GN-GSA-MW-5	2/6/2018 9:02	415	uS/cm	Conductivity
GN-GSA-MW-5	2/6/2018 9:02	29.05	ft	Depth to Water Detail
GN-GSA-MW-5	2/6/2018 9:02	0.15	mg/L	DO
GN-GSA-MW-5	2/6/2018 9:02	24.6	mv	Oxidation Reduction Potention
GN-GSA-MW-5	2/6/2018 9:02	6.36	pH	pH
GN-GSA-MW-5	2/6/2018 9:02	18.12	C	Temperature
GN-GSA-MW-5	2/6/2018 9:02	3.15	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-6	2/6/2018 10:04	27.5	uS/cm	Conductivity
GN-GSA-MW-6	2/6/2018 10:04	28.2	ft	Depth to Water Detail
GN-GSA-MW-6	2/6/2018 10:04	0.62	mg/L	DO
GN-GSA-MW-6	2/6/2018 10:04	174.6	mv	Oxidation Reduction Potention
GN-GSA-MW-6	2/6/2018 10:04	4.52	pH	pH
GN-GSA-MW-6	2/6/2018 10:04	18.64	C	Temperature
GN-GSA-MW-6	2/6/2018 10:04	0.81	NTU	Turbidity
GN-GSA-MW-6	2/6/2018 10:09	27.5	uS/cm	Conductivity
GN-GSA-MW-6	2/6/2018 10:09	28.2	ft	Depth to Water Detail
GN-GSA-MW-6	2/6/2018 10:09	0.44	mg/L	DO
GN-GSA-MW-6	2/6/2018 10:09	168.6	mv	Oxidation Reduction Potention
GN-GSA-MW-6	2/6/2018 10:09	4.54	pH	pH
GN-GSA-MW-6	2/6/2018 10:09	18.75	C	Temperature
GN-GSA-MW-6	2/6/2018 10:09	1.99	NTU	Turbidity
GN-GSA-MW-6	2/6/2018 10:14	27.7	uS/cm	Conductivity
GN-GSA-MW-6	2/6/2018 10:14	28.2	ft	Depth to Water Detail
GN-GSA-MW-6	2/6/2018 10:14	0.35	mg/L	DO
GN-GSA-MW-6	2/6/2018 10:14	163.4	mv	Oxidation Reduction Potention
GN-GSA-MW-6	2/6/2018 10:14	4.58	pH	pH
GN-GSA-MW-6	2/6/2018 10:14	18.97	C	Temperature
GN-GSA-MW-6	2/6/2018 10:14	1.49	NTU	Turbidity
GN-GSA-MW-6	2/6/2018 10:19	27.8	uS/cm	Conductivity
GN-GSA-MW-6	2/6/2018 10:19	28.2	ft	Depth to Water Detail
GN-GSA-MW-6	2/6/2018 10:19	0.31	mg/L	DO
GN-GSA-MW-6	2/6/2018 10:19	161.2	mv	Oxidation Reduction Potention
GN-GSA-MW-6	2/6/2018 10:19	4.61	pH	pH
GN-GSA-MW-6	2/6/2018 10:19	19.17	C	Temperature
GN-GSA-MW-6	2/6/2018 10:19	1.12	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-7	2/6/2018 10:54	394.8	uS/cm	Conductivity
GN-GSA-MW-7	2/6/2018 10:54	26.71	ft	Depth to Water Detail
GN-GSA-MW-7	2/6/2018 10:54	1.06	mg/L	DO
GN-GSA-MW-7	2/6/2018 10:54	9.6	mv	Oxidation Reduction Potention
GN-GSA-MW-7	2/6/2018 10:54	6.64	pH	pH
GN-GSA-MW-7	2/6/2018 10:54	18.71	C	Temperature
GN-GSA-MW-7	2/6/2018 10:54	6.34	NTU	Turbidity
GN-GSA-MW-7	2/6/2018 10:59	390.9	uS/cm	Conductivity
GN-GSA-MW-7	2/6/2018 10:59	27.13	ft	Depth to Water Detail
GN-GSA-MW-7	2/6/2018 10:59	0.5	mg/L	DO
GN-GSA-MW-7	2/6/2018 10:59	5.3	mv	Oxidation Reduction Potention
GN-GSA-MW-7	2/6/2018 10:59	6.69	pH	pH
GN-GSA-MW-7	2/6/2018 10:59	19.19	C	Temperature
GN-GSA-MW-7	2/6/2018 10:59	4.14	NTU	Turbidity
GN-GSA-MW-7	2/6/2018 11:04	390.3	uS/cm	Conductivity
GN-GSA-MW-7	2/6/2018 11:04	27.36	ft	Depth to Water Detail
GN-GSA-MW-7	2/6/2018 11:04	0.4	mg/L	DO
GN-GSA-MW-7	2/6/2018 11:04	8.7	mv	Oxidation Reduction Potention
GN-GSA-MW-7	2/6/2018 11:04	6.71	pH	pH
GN-GSA-MW-7	2/6/2018 11:04	19.53	C	Temperature
GN-GSA-MW-7	2/6/2018 11:04	2.75	NTU	Turbidity
GN-GSA-MW-7	2/6/2018 11:09	386.7	uS/cm	Conductivity
GN-GSA-MW-7	2/6/2018 11:09	27.6	ft	Depth to Water Detail
GN-GSA-MW-7	2/6/2018 11:09	0.46	mg/L	DO
GN-GSA-MW-7	2/6/2018 11:09	20	mv	Oxidation Reduction Potention
GN-GSA-MW-7	2/6/2018 11:09	6.71	pH	pH
GN-GSA-MW-7	2/6/2018 11:09	19.68	C	Temperature
GN-GSA-MW-7	2/6/2018 11:09	2.39	NTU	Turbidity
GN-GSA-MW-7	2/6/2018 11:14	384.5	uS/cm	Conductivity
GN-GSA-MW-7	2/6/2018 11:14	27.75	ft	Depth to Water Detail
GN-GSA-MW-7	2/6/2018 11:14	0.51	mg/L	DO
GN-GSA-MW-7	2/6/2018 11:14	26.2	mv	Oxidation Reduction Potention
GN-GSA-MW-7	2/6/2018 11:14	6.71	pH	pH
GN-GSA-MW-7	2/6/2018 11:14	19.9	C	Temperature
GN-GSA-MW-7	2/6/2018 11:14	2.76	NTU	Turbidity
GN-GSA-MW-7	2/6/2018 11:19	380.6	uS/cm	Conductivity
GN-GSA-MW-7	2/6/2018 11:19	27.83	ft	Depth to Water Detail
GN-GSA-MW-7	2/6/2018 11:19	0.52	mg/L	DO
GN-GSA-MW-7	2/6/2018 11:19	30.9	mv	Oxidation Reduction Potention
GN-GSA-MW-7	2/6/2018 11:19	6.71	pH	pH
GN-GSA-MW-7	2/6/2018 11:19	19.81	C	Temperature
GN-GSA-MW-7	2/6/2018 11:19	2.54	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-8	2/6/2018 12:04	342.1	uS/cm	Conductivity
GN-GSA-MW-8	2/6/2018 12:04	21.27	ft	Depth to Water Detail
GN-GSA-MW-8	2/6/2018 12:04	0.39	mg/L	DO
GN-GSA-MW-8	2/6/2018 12:04	-110.2	mv	Oxidation Reduction Potention
GN-GSA-MW-8	2/6/2018 12:04	7.31	pH	pH
GN-GSA-MW-8	2/6/2018 12:04	20.24	C	Temperature
GN-GSA-MW-8	2/6/2018 12:04	2.72	NTU	Turbidity
GN-GSA-MW-8	2/6/2018 12:09	343	uS/cm	Conductivity
GN-GSA-MW-8	2/6/2018 12:09	21.39	ft	Depth to Water Detail
GN-GSA-MW-8	2/6/2018 12:09	0.43	mg/L	DO
GN-GSA-MW-8	2/6/2018 12:09	-116.6	mv	Oxidation Reduction Potention
GN-GSA-MW-8	2/6/2018 12:09	7.35	pH	pH
GN-GSA-MW-8	2/6/2018 12:09	20.08	C	Temperature
GN-GSA-MW-8	2/6/2018 12:09	1.58	NTU	Turbidity
GN-GSA-MW-8	2/6/2018 12:14	342.7	uS/cm	Conductivity
GN-GSA-MW-8	2/6/2018 12:14	21.48	ft	Depth to Water Detail
GN-GSA-MW-8	2/6/2018 12:14	0.47	mg/L	DO
GN-GSA-MW-8	2/6/2018 12:14	-118.9	mv	Oxidation Reduction Potention
GN-GSA-MW-8	2/6/2018 12:14	7.39	pH	pH
GN-GSA-MW-8	2/6/2018 12:14	20.08	C	Temperature
GN-GSA-MW-8	2/6/2018 12:14	1.86	NTU	Turbidity
GN-GSA-MW-8	2/6/2018 12:19	341	uS/cm	Conductivity
GN-GSA-MW-8	2/6/2018 12:19	21.6	ft	Depth to Water Detail
GN-GSA-MW-8	2/6/2018 12:19	0.51	mg/L	DO
GN-GSA-MW-8	2/6/2018 12:19	-118.1	mv	Oxidation Reduction Potention
GN-GSA-MW-8	2/6/2018 12:19	7.41	pH	pH
GN-GSA-MW-8	2/6/2018 12:19	20.13	C	Temperature
GN-GSA-MW-8	2/6/2018 12:19	1.6	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-9	2/6/2018 13:22	271.6	uS/cm	Conductivity
GN-GSA-MW-9	2/6/2018 13:22	20.3	ft	Depth to Water Detail
GN-GSA-MW-9	2/6/2018 13:22	0.15	mg/L	DO
GN-GSA-MW-9	2/6/2018 13:22	10.7	mv	Oxidation Reduction Potention
GN-GSA-MW-9	2/6/2018 13:22	6.74	pH	pH
GN-GSA-MW-9	2/6/2018 13:22	19.9	C	Temperature
GN-GSA-MW-9	2/6/2018 13:22	5.68	NTU	Turbidity
GN-GSA-MW-9	2/6/2018 13:27	272.9	uS/cm	Conductivity
GN-GSA-MW-9	2/6/2018 13:27	20.2	ft	Depth to Water Detail
GN-GSA-MW-9	2/6/2018 13:27	0.14	mg/L	DO
GN-GSA-MW-9	2/6/2018 13:27	8.7	mv	Oxidation Reduction Potention
GN-GSA-MW-9	2/6/2018 13:27	6.78	pH	pH
GN-GSA-MW-9	2/6/2018 13:27	19.8	C	Temperature
GN-GSA-MW-9	2/6/2018 13:27	6.03	NTU	Turbidity
GN-GSA-MW-9	2/6/2018 13:32	269.2	uS/cm	Conductivity
GN-GSA-MW-9	2/6/2018 13:32	20.2	ft	Depth to Water Detail
GN-GSA-MW-9	2/6/2018 13:32	0.17	mg/L	DO
GN-GSA-MW-9	2/6/2018 13:32	11.6	mv	Oxidation Reduction Potention
GN-GSA-MW-9	2/6/2018 13:32	6.79	pH	pH
GN-GSA-MW-9	2/6/2018 13:32	19.97	C	Temperature
GN-GSA-MW-9	2/6/2018 13:32	3.85	NTU	Turbidity
GN-GSA-MW-9	2/6/2018 13:37	267.3	uS/cm	Conductivity
GN-GSA-MW-9	2/6/2018 13:37	20.2	ft	Depth to Water Detail
GN-GSA-MW-9	2/6/2018 13:37	0.19	mg/L	DO
GN-GSA-MW-9	2/6/2018 13:37	14.8	mv	Oxidation Reduction Potention
GN-GSA-MW-9	2/6/2018 13:37	6.8	pH	pH
GN-GSA-MW-9	2/6/2018 13:37	19.89	C	Temperature
GN-GSA-MW-9	2/6/2018 13:37	1.98	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-10	2/6/2018 14:07	428.8	uS/cm	Conductivity
GN-GSA-MW-10	2/6/2018 14:07	21.3	ft	Depth to Water Detail
GN-GSA-MW-10	2/6/2018 14:07	0.16	mg/L	DO
GN-GSA-MW-10	2/6/2018 14:07	74.5	mv	Oxidation Reduction Potential
GN-GSA-MW-10	2/6/2018 14:07	7.09	pH	pH
GN-GSA-MW-10	2/6/2018 14:07	21.2	C	Temperature
GN-GSA-MW-10	2/6/2018 14:07	1.82	NTU	Turbidity
GN-GSA-MW-10	2/6/2018 14:12	434.6	uS/cm	Conductivity
GN-GSA-MW-10	2/6/2018 14:12	21.31	ft	Depth to Water Detail
GN-GSA-MW-10	2/6/2018 14:12	0.13	mg/L	DO
GN-GSA-MW-10	2/6/2018 14:12	79.1	mv	Oxidation Reduction Potential
GN-GSA-MW-10	2/6/2018 14:12	7.1	pH	pH
GN-GSA-MW-10	2/6/2018 14:12	21.16	C	Temperature
GN-GSA-MW-10	2/6/2018 14:12	1.63	NTU	Turbidity
GN-GSA-MW-10	2/6/2018 14:17	436	uS/cm	Conductivity
GN-GSA-MW-10	2/6/2018 14:17	21.31	ft	Depth to Water Detail
GN-GSA-MW-10	2/6/2018 14:17	0.11	mg/L	DO
GN-GSA-MW-10	2/6/2018 14:17	81.2	mv	Oxidation Reduction Potential
GN-GSA-MW-10	2/6/2018 14:17	7.09	pH	pH
GN-GSA-MW-10	2/6/2018 14:17	21.28	C	Temperature
GN-GSA-MW-10	2/6/2018 14:17	1.33	NTU	Turbidity
GN-GSA-MW-10	2/6/2018 14:22	436.9	uS/cm	Conductivity
GN-GSA-MW-10	2/6/2018 14:22	21.31	ft	Depth to Water Detail
GN-GSA-MW-10	2/6/2018 14:22	0.1	mg/L	DO
GN-GSA-MW-10	2/6/2018 14:22	83.2	mv	Oxidation Reduction Potential
GN-GSA-MW-10	2/6/2018 14:22	7.09	pH	pH
GN-GSA-MW-10	2/6/2018 14:22	21.3	C	Temperature
GN-GSA-MW-10	2/6/2018 14:22	1.32	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-11	2/6/2018 14:49	170.2	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 14:49	21	ft	Depth to Water Detail
GN-GSA-MW-11	2/6/2018 14:49	1.33	mg/L	DO
GN-GSA-MW-11	2/6/2018 14:49	99.6	mv	Oxidation Reduction Potention
GN-GSA-MW-11	2/6/2018 14:49	6.62	pH	pH
GN-GSA-MW-11	2/6/2018 14:49	21.2	C	Temperature
GN-GSA-MW-11	2/6/2018 14:49	0.67	NTU	Turbidity
GN-GSA-MW-11	2/6/2018 14:54	151.7	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 14:54	21	ft	Depth to Water Detail
GN-GSA-MW-11	2/6/2018 14:54	0.99	mg/L	DO
GN-GSA-MW-11	2/6/2018 14:54	97.2	mv	Oxidation Reduction Potention
GN-GSA-MW-11	2/6/2018 14:54	6.5	pH	pH
GN-GSA-MW-11	2/6/2018 14:54	21.33	C	Temperature
GN-GSA-MW-11	2/6/2018 14:54	0.49	NTU	Turbidity
GN-GSA-MW-11	2/6/2018 14:59	137.6	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 14:59	21	ft	Depth to Water Detail
GN-GSA-MW-11	2/6/2018 14:59	0.72	mg/L	DO
GN-GSA-MW-11	2/6/2018 14:59	97.2	mv	Oxidation Reduction Potention
GN-GSA-MW-11	2/6/2018 14:59	6.36	pH	pH
GN-GSA-MW-11	2/6/2018 14:59	21.38	C	Temperature
GN-GSA-MW-11	2/6/2018 14:59	0.51	NTU	Turbidity
GN-GSA-MW-11	2/6/2018 15:04	133.2	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 15:04	21	ft	Depth to Water Detail
GN-GSA-MW-11	2/6/2018 15:04	0.61	mg/L	DO
GN-GSA-MW-11	2/6/2018 15:04	94.5	mv	Oxidation Reduction Potention
GN-GSA-MW-11	2/6/2018 15:04	6.32	pH	pH
GN-GSA-MW-11	2/6/2018 15:04	21.27	C	Temperature
GN-GSA-MW-11	2/6/2018 15:04	0.44	NTU	Turbidity
GN-GSA-MW-11	2/6/2018 15:09	125.4	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 15:09	21	ft	Depth to Water Detail
GN-GSA-MW-11	2/6/2018 15:09	0.52	mg/L	DO
GN-GSA-MW-11	2/6/2018 15:09	92	mv	Oxidation Reduction Potention
GN-GSA-MW-11	2/6/2018 15:09	6.26	pH	pH
GN-GSA-MW-11	2/6/2018 15:09	21.11	C	Temperature
GN-GSA-MW-11	2/6/2018 15:09	0.42	NTU	Turbidity
GN-GSA-MW-11	2/6/2018 15:14	122.7	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 15:14	21	ft	Depth to Water Detail
GN-GSA-MW-11	2/6/2018 15:14	0.45	mg/L	DO
GN-GSA-MW-11	2/6/2018 15:14	88.9	mv	Oxidation Reduction Potention
GN-GSA-MW-11	2/6/2018 15:14	6.24	pH	pH
GN-GSA-MW-11	2/6/2018 15:14	21.11	C	Temperature
GN-GSA-MW-11	2/6/2018 15:14	0.37	NTU	Turbidity
GN-GSA-MW-11	2/6/2018 15:19	115	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 15:19	21	ft	Depth to Water Detail

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-11	2/6/2018 15:19	0.37	mg/L	DO
GN-GSA-MW-11	2/6/2018 15:19	89.3	mv	Oxidation Reduction Potential
GN-GSA-MW-11	2/6/2018 15:19	6.19	pH	pH
GN-GSA-MW-11	2/6/2018 15:19	21.24	C	Temperature
GN-GSA-MW-11	2/6/2018 15:19	0.37	NTU	Turbidity
GN-GSA-MW-11	2/6/2018 15:24	112.2	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 15:24	21	ft	Depth to Water Detail
GN-GSA-MW-11	2/6/2018 15:24	0.36	mg/L	DO
GN-GSA-MW-11	2/6/2018 15:24	90.1	mv	Oxidation Reduction Potential
GN-GSA-MW-11	2/6/2018 15:24	6.16	pH	pH
GN-GSA-MW-11	2/6/2018 15:24	21.3	C	Temperature
GN-GSA-MW-11	2/6/2018 15:24	0.3	NTU	Turbidity
GN-GSA-MW-11	2/6/2018 15:29	113.6	uS/cm	Conductivity
GN-GSA-MW-11	2/6/2018 15:29	21	ft	Depth to Water Detail
GN-GSA-MW-11	2/6/2018 15:29	0.31	mg/L	DO
GN-GSA-MW-11	2/6/2018 15:29	89.9	mv	Oxidation Reduction Potential
GN-GSA-MW-11	2/6/2018 15:29	6.17	pH	pH
GN-GSA-MW-11	2/6/2018 15:29	21.33	C	Temperature
GN-GSA-MW-11	2/6/2018 15:29	0.34	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-12	2/5/2018 15:19	443.1	uS/cm	Conductivity
GN-GSA-MW-12	2/5/2018 15:19	18.9	ft	Depth to Water Detail
GN-GSA-MW-12	2/5/2018 15:19	0.46	mg/L	DO
GN-GSA-MW-12	2/5/2018 15:19	-6.3	mv	Oxidation Reduction Potention
GN-GSA-MW-12	2/5/2018 15:19	7.34	pH	pH
GN-GSA-MW-12	2/5/2018 15:19	20	C	Temperature
GN-GSA-MW-12	2/5/2018 15:19	3.89	NTU	Turbidity
GN-GSA-MW-12	2/5/2018 15:24	442.2	uS/cm	Conductivity
GN-GSA-MW-12	2/5/2018 15:24	18.9	ft	Depth to Water Detail
GN-GSA-MW-12	2/5/2018 15:24	0.31	mg/L	DO
GN-GSA-MW-12	2/5/2018 15:24	-24.8	mv	Oxidation Reduction Potention
GN-GSA-MW-12	2/5/2018 15:24	7.29	pH	pH
GN-GSA-MW-12	2/5/2018 15:24	19.99	C	Temperature
GN-GSA-MW-12	2/5/2018 15:24	2.31	NTU	Turbidity
GN-GSA-MW-12	2/5/2018 15:29	439.5	uS/cm	Conductivity
GN-GSA-MW-12	2/5/2018 15:29	18.9	ft	Depth to Water Detail
GN-GSA-MW-12	2/5/2018 15:29	0.24	mg/L	DO
GN-GSA-MW-12	2/5/2018 15:29	-26.2	mv	Oxidation Reduction Potention
GN-GSA-MW-12	2/5/2018 15:29	7.25	pH	pH
GN-GSA-MW-12	2/5/2018 15:29	19.98	C	Temperature
GN-GSA-MW-12	2/5/2018 15:29	2.22	NTU	Turbidity
GN-GSA-MW-12	2/5/2018 15:34	438.6	uS/cm	Conductivity
GN-GSA-MW-12	2/5/2018 15:34	18.9	ft	Depth to Water Detail
GN-GSA-MW-12	2/5/2018 15:34	0.22	mg/L	DO
GN-GSA-MW-12	2/5/2018 15:34	-30.2	mv	Oxidation Reduction Potention
GN-GSA-MW-12	2/5/2018 15:34	7.22	pH	pH
GN-GSA-MW-12	2/5/2018 15:34	19.99	C	Temperature
GN-GSA-MW-12	2/5/2018 15:34	1.79	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-13	2/5/2018 12:28	493.7	uS/cm	Conductivity
GN-GSA-MW-13	2/5/2018 12:28	22.01	ft	Depth to Water Detail
GN-GSA-MW-13	2/5/2018 12:28	0.21	mg/L	DO
GN-GSA-MW-13	2/5/2018 12:28	91.8	mv	Oxidation Reduction Potential
GN-GSA-MW-13	2/5/2018 12:28	7.12	pH	pH
GN-GSA-MW-13	2/5/2018 12:28	19.37	C	Temperature
GN-GSA-MW-13	2/5/2018 12:28	4.38	NTU	Turbidity
GN-GSA-MW-13	2/5/2018 12:33	491.6	uS/cm	Conductivity
GN-GSA-MW-13	2/5/2018 12:33	22.01	ft	Depth to Water Detail
GN-GSA-MW-13	2/5/2018 12:33	0.19	mg/L	DO
GN-GSA-MW-13	2/5/2018 12:33	91.6	mv	Oxidation Reduction Potential
GN-GSA-MW-13	2/5/2018 12:33	7.12	pH	pH
GN-GSA-MW-13	2/5/2018 12:33	19.45	C	Temperature
GN-GSA-MW-13	2/5/2018 12:33	6.25	NTU	Turbidity
GN-GSA-MW-13	2/5/2018 12:38	491.1	uS/cm	Conductivity
GN-GSA-MW-13	2/5/2018 12:38	22.01	ft	Depth to Water Detail
GN-GSA-MW-13	2/5/2018 12:38	0.19	mg/L	DO
GN-GSA-MW-13	2/5/2018 12:38	91.6	mv	Oxidation Reduction Potential
GN-GSA-MW-13	2/5/2018 12:38	7.12	pH	pH
GN-GSA-MW-13	2/5/2018 12:38	19.45	C	Temperature
GN-GSA-MW-13	2/5/2018 12:38	5.42	NTU	Turbidity
GN-GSA-MW-13	2/5/2018 12:43	491	uS/cm	Conductivity
GN-GSA-MW-13	2/5/2018 12:43	22.01	ft	Depth to Water Detail
GN-GSA-MW-13	2/5/2018 12:43	0.2	mg/L	DO
GN-GSA-MW-13	2/5/2018 12:43	92.3	mv	Oxidation Reduction Potential
GN-GSA-MW-13	2/5/2018 12:43	7.12	pH	pH
GN-GSA-MW-13	2/5/2018 12:43	19.37	C	Temperature
GN-GSA-MW-13	2/5/2018 12:43	3.2	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-14S	2/6/2018 15:57	372.7	uS/cm	Conductivity
GN-GSA-MW-14S	2/6/2018 15:57	24.19	ft	Depth to Water Detail
GN-GSA-MW-14S	2/6/2018 15:57	0.13	mg/L	DO
GN-GSA-MW-14S	2/6/2018 15:57	-34.9	mv	Oxidation Reduction Potention
GN-GSA-MW-14S	2/6/2018 15:57	7.34	pH	pH
GN-GSA-MW-14S	2/6/2018 15:57	20.08	C	Temperature
GN-GSA-MW-14S	2/6/2018 15:57	2.07	NTU	Turbidity
GN-GSA-MW-14S	2/6/2018 16:02	373.3	uS/cm	Conductivity
GN-GSA-MW-14S	2/6/2018 16:02	24.19	ft	Depth to Water Detail
GN-GSA-MW-14S	2/6/2018 16:02	0.11	mg/L	DO
GN-GSA-MW-14S	2/6/2018 16:02	-52.4	mv	Oxidation Reduction Potention
GN-GSA-MW-14S	2/6/2018 16:02	7.4	pH	pH
GN-GSA-MW-14S	2/6/2018 16:02	19.95	C	Temperature
GN-GSA-MW-14S	2/6/2018 16:02	4.3	NTU	Turbidity
GN-GSA-MW-14S	2/6/2018 16:07	378.3	uS/cm	Conductivity
GN-GSA-MW-14S	2/6/2018 16:07	24.19	ft	Depth to Water Detail
GN-GSA-MW-14S	2/6/2018 16:07	0.1	mg/L	DO
GN-GSA-MW-14S	2/6/2018 16:07	-69.7	mv	Oxidation Reduction Potention
GN-GSA-MW-14S	2/6/2018 16:07	7.44	pH	pH
GN-GSA-MW-14S	2/6/2018 16:07	19.93	C	Temperature
GN-GSA-MW-14S	2/6/2018 16:07	3.69	NTU	Turbidity
GN-GSA-MW-14S	2/6/2018 16:12	373.6	uS/cm	Conductivity
GN-GSA-MW-14S	2/6/2018 16:12	24.19	ft	Depth to Water Detail
GN-GSA-MW-14S	2/6/2018 16:12	0.11	mg/L	DO
GN-GSA-MW-14S	2/6/2018 16:12	-70.4	mv	Oxidation Reduction Potention
GN-GSA-MW-14S	2/6/2018 16:12	7.47	pH	pH
GN-GSA-MW-14S	2/6/2018 16:12	19.86	C	Temperature
GN-GSA-MW-14S	2/6/2018 16:12	2.82	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-15	2/7/2018 13:19	115.5	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:19	18.2	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 13:19	0.71	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:19	10.3	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:19	6.28	pH	pH
GN-GSA-MW-15	2/7/2018 13:19	17.81	C	Temperature
GN-GSA-MW-15	2/7/2018 13:19	10.59	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 13:24	109.6	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:24	18.47	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 13:24	0.46	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:24	11	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:24	6.27	pH	pH
GN-GSA-MW-15	2/7/2018 13:24	17.64	C	Temperature
GN-GSA-MW-15	2/7/2018 13:24	5.27	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 13:29	105.7	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:29	18.65	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 13:29	0.37	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:29	12.2	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:29	6.28	pH	pH
GN-GSA-MW-15	2/7/2018 13:29	17.54	C	Temperature
GN-GSA-MW-15	2/7/2018 13:29	5.27	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 13:34	97.5	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:34	18.75	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 13:34	0.33	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:34	16.3	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:34	6.26	pH	pH
GN-GSA-MW-15	2/7/2018 13:34	17.54	C	Temperature
GN-GSA-MW-15	2/7/2018 13:34	2.79	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 13:39	89	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:39	18.86	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 13:39	0.42	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:39	27.5	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:39	6.21	pH	pH
GN-GSA-MW-15	2/7/2018 13:39	17.58	C	Temperature
GN-GSA-MW-15	2/7/2018 13:39	2.17	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 13:44	75.3	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:44	18.96	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 13:44	0.73	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:44	42.3	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:44	6.15	pH	pH
GN-GSA-MW-15	2/7/2018 13:44	17.6	C	Temperature
GN-GSA-MW-15	2/7/2018 13:44	3.12	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 13:49	67.5	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:49	19.03	ft	Depth to Water Detail

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-15	2/7/2018 13:49	1.02	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:49	56.4	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:49	6.07	pH	pH
GN-GSA-MW-15	2/7/2018 13:49	17.59	C	Temperature
GN-GSA-MW-15	2/7/2018 13:49	2.96	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 13:54	60.2	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:54	19.07	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 13:54	1.27	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:54	66.3	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:54	6.02	pH	pH
GN-GSA-MW-15	2/7/2018 13:54	17.55	C	Temperature
GN-GSA-MW-15	2/7/2018 13:54	2.67	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 13:59	56.9	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 13:59	19.13	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 13:59	1.41	mg/L	DO
GN-GSA-MW-15	2/7/2018 13:59	73.2	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 13:59	5.97	pH	pH
GN-GSA-MW-15	2/7/2018 13:59	17.59	C	Temperature
GN-GSA-MW-15	2/7/2018 13:59	3.27	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 14:04	54.2	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 14:04	19.15	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 14:04	1.52	mg/L	DO
GN-GSA-MW-15	2/7/2018 14:04	77.8	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 14:04	5.92	pH	pH
GN-GSA-MW-15	2/7/2018 14:04	17.54	C	Temperature
GN-GSA-MW-15	2/7/2018 14:04	2.37	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 14:09	53.6	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 14:09	19.15	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 14:09	1.59	mg/L	DO
GN-GSA-MW-15	2/7/2018 14:09	79.9	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 14:09	5.91	pH	pH
GN-GSA-MW-15	2/7/2018 14:09	17.56	C	Temperature
GN-GSA-MW-15	2/7/2018 14:09	2.22	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 14:14	51.5	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 14:14	19.16	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 14:14	1.64	mg/L	DO
GN-GSA-MW-15	2/7/2018 14:14	81.9	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 14:14	5.88	pH	pH
GN-GSA-MW-15	2/7/2018 14:14	17.62	C	Temperature
GN-GSA-MW-15	2/7/2018 14:14	2.16	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 14:24	49.7	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 14:24	19.19	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 14:24	1.71	mg/L	DO
GN-GSA-MW-15	2/7/2018 14:24	82.7	mv	Oxidation Reduction Potention

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-15	2/7/2018 14:24	5.87	pH	pH
GN-GSA-MW-15	2/7/2018 14:24	17.64	C	Temperature
GN-GSA-MW-15	2/7/2018 14:24	2.05	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 14:29	49.3	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 14:29	19.2	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 14:29	1.77	mg/L	DO
GN-GSA-MW-15	2/7/2018 14:29	82.8	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 14:29	5.86	pH	pH
GN-GSA-MW-15	2/7/2018 14:29	17.59	C	Temperature
GN-GSA-MW-15	2/7/2018 14:29	1.9	NTU	Turbidity
GN-GSA-MW-15	2/7/2018 14:34	48.98	uS/cm	Conductivity
GN-GSA-MW-15	2/7/2018 14:34	19.21	ft	Depth to Water Detail
GN-GSA-MW-15	2/7/2018 14:34	1.82	mg/L	DO
GN-GSA-MW-15	2/7/2018 14:34	83.1	mv	Oxidation Reduction Potention
GN-GSA-MW-15	2/7/2018 14:34	5.86	pH	pH
GN-GSA-MW-15	2/7/2018 14:34	17.59	C	Temperature
GN-GSA-MW-15	2/7/2018 14:34	3.41	NTU	Turbidity



E. C. Gaston Gypsum Storage Area

2018 Compliance Sample 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).

Suspected iron bacteria present at MW-9. Orange coloration diminished as pumping continued.

Rain showers were present when sampling well MW-2 and while collecting Equipment Blank 1 (EB-1).

Field quality control procedures were performed as follows:

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

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

Analytical Report



Sample Group : WMWGASG_1155
Project/Site : Gaston Gypsum
Wilsonville, AL 35186
For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243
Attention : Dustin Brooks & Greg Dyer
Released By : Sarah Copeland
sgcopela@southernco.com
(205) 664-6121

The following data has been reviewed and approved by:

Quality Control: Sarah
Copeland

Digitally signed by Sarah Copeland
DN: cn=Sarah Copeland, o, ou,
email=sgcopela@southernco.com,
c=US
Date: 2018.07.10 16:19:06 -05'00'

Supervision: T. Durant
Maske

Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama
Power Company, ou=Environmental
Affairs, email=tdmaske@southernco.com,
c=US
Date: 2018.07.10 17:14:05 -05'00'



Metals ICP

Gaston Gypsum

WMWGASG_1155

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY13775	621844	WMWGASG_1155
AY13776	621844	WMWGASG_1155
AY13777	621844	WMWGASG_1155
AY13778	621844	WMWGASG_1155
AY13779	621844	WMWGASG_1155
AY13780	621844	WMWGASG_1155
AY13781	621844	WMWGASG_1155
AY13782	621844	WMWGASG_1155
AY13783	621844	WMWGASG_1155
AY13784	621844	WMWGASG_1155
AY13785	621875	WMWGASG_1155
AY13786	621875	WMWGASG_1155
AY13787	621875	WMWGASG_1155
AY13788	621875	WMWGASG_1155
AY13789	621875	WMWGASG_1155
AY13790	621875	WMWGASG_1155
AY13791	621875	WMWGASG_1155
AY13792	621875	WMWGASG_1155
AY13793	621875	WMWGASG_1155

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 passed.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.



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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
7. All samples were analyzed at a x2.03 dilution to compensate for potential matrix effects. The following samples were diluted due to analyzed sample concentration over the high standard of the calibration curve.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AY13780	Calcium	x10.15
AY13783	Calcium	x10.15
AY13791	Calcium	x10.15

8. The raw data results include results corrected for dilution.



Metals ICPMS

Gaston Gypsum

WMWGASG_1155

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY13775	622115	WMWGASG_1155
AY13776	622115	WMWGASG_1155
AY13777	622115	WMWGASG_1155
AY13778	622115	WMWGASG_1155
AY13779	622115	WMWGASG_1155
AY13780	622115	WMWGASG_1155
AY13781	622115	WMWGASG_1155
AY13782	622115	WMWGASG_1155
AY13783	622115	WMWGASG_1155
AY13784	622115	WMWGASG_1155
AY13785	622116	WMWGASG_1155
AY13786	622116	WMWGASG_1155
AY13787	622116	WMWGASG_1155
AY13788	622116	WMWGASG_1155
AY13789	622116	WMWGASG_1155
AY13790	622116	WMWGASG_1155
AY13791	622116	WMWGASG_1155
AY13792	622116	WMWGASG_1155
AY13793	622116	WMWGASG_1155

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

General Quality Control Procedures:

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



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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met except for AY13784 Barium. The spike was invalid since spike amount was <30% sample amount.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.
7. All samples were analyzed at a dilution of 1 to 5 to compensate for any matrix effects.
 8. The raw data results are shown with dilution factors included.



Mercury

Gaston Gypsum

WMWGASG_1155

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY13775	622793	WMWGASG_1155
AY13776	622793	WMWGASG_1155
AY13777	622793	WMWGASG_1155
AY13778	622793	WMWGASG_1155
AY13779	622793	WMWGASG_1155
AY13780	622793	WMWGASG_1155
AY13781	622793	WMWGASG_1155
AY13782	622793	WMWGASG_1155
AY13783	622793	WMWGASG_1155
AY13784	622793	WMWGASG_1155
AY13785	622794	WMWGASG_1155
AY13786	622794	WMWGASG_1155
AY13787	622794	WMWGASG_1155
AY13788	622794	WMWGASG_1155
AY13789	622794	WMWGASG_1155
AY13790	622794	WMWGASG_1155
AY13791	622794	WMWGASG_1155
AY13792	622794	WMWGASG_1155
AY13793	622794	WMWGASG_1155

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

General Quality Control Procedures:

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



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

Matrix Specific Quality Control Procedures:

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

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



TDS

Gaston Gypsum

WMWGASG_1155

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY13775	622130	WMWGASG_1155
AY13776	622130	WMWGASG_1155
AY13777	622130	WMWGASG_1155
AY13778	622130	WMWGASG_1155
AY13779	622472	WMWGASG_1155
AY13780	622472	WMWGASG_1155
AY13781	622472	WMWGASG_1155
AY13782	622472	WMWGASG_1155
AY13783	622473	WMWGASG_1155
AY13784	622473	WMWGASG_1155
AY13785	622473	WMWGASG_1155
AY13786	622473	WMWGASG_1155
AY13787	622473	WMWGASG_1155
AY13788	622473	WMWGASG_1155
AY13789	622130	WMWGASG_1155
AY13790	622130	WMWGASG_1155
AY13791	622473	WMWGASG_1155
AY13792	622473	WMWGASG_1155
AY13793	622473	WMWGASG_1155

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



General Quality Control Procedures:

- A blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- All samples were between 2.5mg and 200mg residue with the exception of AY13790, AY13792, and AY13793 which were below the 2.5mg residue requirement. Maximum volume of 150mL filtered.

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY13775

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	J 0.00119	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0560	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	J 0.0386	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	62.4	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	J 0.00472	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/18/2018	SM 2540C		1		25	312	mg/L
Filter Completion Date	CES	6/14/2018	SM 2540C		1			6/14/18	Date

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY13775

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec
			Limit	MB					Limit	Rec	Limit	Prec	
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15	95.8	70 to 130	0.630	20
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115	93.7	70 to 130	2.06	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115	34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115	95.6	70 to 130	1.84	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115	97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23	103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115	102	70 to 130	1.29	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115	97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75	101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115	97.4	70 to 130	2.86	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115	96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046	100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115	93.6	70 to 130	0.185	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115	101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115	97.1	70 to 130	2.87	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY13775

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	Rec	Prec	Prec	
								Duplicate	LCS	Limit	Rec	Limit	Limit
AY13778	Solids, Dissolved	mg/L	3.00		25			188	48.0	40 to 60			0.535
	Filter Completion Date	Date											5

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY13776

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0155	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	0.722	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/18/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CES	6/14/2018	SM 2540C		1			6/14/18	Date

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY13776

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15	95.8	70 to 130	0.630	20
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115	93.7	70 to 130	2.06	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115	97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75	101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115	97.4	70 to 130	2.86	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115	101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115	97.1	70 to 130	2.87	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115	97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23	103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115	102	70 to 130	1.29	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115	34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115	95.6	70 to 130	1.84	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115	96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046	100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115	93.6	70 to 130	0.185	20

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY13776

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	Rec	Prec	Prec	Limit	
								Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AY13778	Solids, Dissolved	mg/L	3.00		25			188	48.0	40 to 60			0.535	5
	Filter Completion Date	Date												

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY13777

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0196	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	63.5	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/18/2018	SM 2540C		1		25	210	mg/L
Filter Completion Date	CES	6/14/2018	SM 2540C		1			6/14/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY13777

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115		93.7	70 to 130	2.06	20
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15		95.8	70 to 130	0.630	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115		97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23		103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115		102	70 to 130	1.29	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115		97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75		101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115		97.4	70 to 130	2.86	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115		34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115		95.6	70 to 130	1.84	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115		96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046		100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115		93.6	70 to 130	0.185	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115		101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115		97.1	70 to 130	2.87	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY13777

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	Rec	Prec	Prec	Limit	
								Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AY13778	Solids, Dissolved	mg/L	3.00		25			188	48.0	40 to 60			0.535	5
	Filter Completion Date	Date												

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY13778

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	J 0.00115	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0299	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	53.7	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	J 0.00325	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/18/2018	SM 2540C		1		25	186	mg/L
Filter Completion Date	CES	6/14/2018	SM 2540C		1			6/14/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY13778

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15	95.8	70 to 130	0.630	20
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115	93.7	70 to 130	2.06	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115	97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23	103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115	102	70 to 130	1.29	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115	97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75	101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115	97.4	70 to 130	2.86	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115	96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046	100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115	93.6	70 to 130	0.185	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115	34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115	95.6	70 to 130	1.84	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115	101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115	97.1	70 to 130	2.87	20

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Laboratory certification ID: E571114

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Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY13778

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY13778	Solids, Dissolved	mg/L	3.00		25			188	48.0		40 to 60			0.535	5	
	Filter Completion Date	Date														

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY13779

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0259	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	47.6	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	167	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY13779

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec Limit		
			MB	Limit					Rec	Limit			
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15	95.8	70 to 130	0.630	20
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115	93.7	70 to 130	2.06	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115	97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23	103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115	102	70 to 130	1.29	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115	97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75	101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115	97.4	70 to 130	2.86	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115	34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115	95.6	70 to 130	1.84	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115	101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115	97.1	70 to 130	2.87	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115	96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046	100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115	93.6	70 to 130	0.185	20

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY13779

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY13782	Solids, Dissolved	mg/L	-2.00		25			233	52.0		40 to 60			0.648	5	
	Filter Completion Date	Date														

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY13780

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0342	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/18/2018	EPA 200.7		10.15	1.015	5.075	101	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	266	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY13780

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15	95.8	70 to 130	0.630	20
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115	93.7	70 to 130	2.06	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115	101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115	97.1	70 to 130	2.87	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115	97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23	103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115	102	70 to 130	1.29	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115	97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75	101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115	97.4	70 to 130	2.86	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115	34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115	95.6	70 to 130	1.84	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115	96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046	100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115	93.6	70 to 130	0.185	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY13780

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	Rec	Prec	Prec	Limit	
								Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AY13782	Solids, Dissolved	mg/L	-2.00	25				233	52.0	40 to 60			0.648	5
	Filter Completion Date	Date												

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

Alabama Power General Test Laboratory
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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY13781

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	J 0.00637	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	J 0.0340	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	11.5	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	J 0.00251	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	72.0	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY13781

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS	Rec		Prec	Limit
				Limit	Spike					Limit	Prec		
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15	95.8	70 to 130	0.630	20
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115	93.7	70 to 130	2.06	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115	97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75	101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115	97.4	70 to 130	2.86	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115	97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23	103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115	102	70 to 130	1.29	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115	96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046	100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115	93.6	70 to 130	0.185	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115	101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115	97.1	70 to 130	2.87	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115	34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115	95.6	70 to 130	1.84	20

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

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Laboratory certification ID: E571114

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Expiration: June 30, 2019

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY13781

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	Rec	Prec	Prec	Limit	
								Duplicate	LCS	Limit	Rec	Limit	Prec	
AY13782	Solids, Dissolved	mg/L	-2.00		25			233	52.0	40 to 60			0.648	5
	Filter Completion Date	Date												

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY13782

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0230	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	J 0.0305	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	69.9	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	230	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY13782

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15	95.8	70 to 130	0.630	20
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115	93.7	70 to 130	2.06	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115	34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115	95.6	70 to 130	1.84	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115	101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115	97.1	70 to 130	2.87	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115	97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23	103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115	102	70 to 130	1.29	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115	97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75	101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115	97.4	70 to 130	2.86	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115	96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046	100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115	93.6	70 to 130	0.185	20

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY13782

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LCS	Limit	Rec	Limit	Prec	
AY13782	Solids, Dissolved	mg/L	-2.00	25				233	52.0	40 to 60			0.648	5
	Filter Completion Date	Date												

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY13783

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0469	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/18/2018	EPA 200.7		10.15	1.015	5.075	101	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	282	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY13783

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15	95.8	70 to 130	0.630	20
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115	93.7	70 to 130	2.06	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115	34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115	95.6	70 to 130	1.84	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115	97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23	103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115	102	70 to 130	1.29	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115	101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115	97.1	70 to 130	2.87	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115	97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75	101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115	97.4	70 to 130	2.86	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115	96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046	100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115	93.6	70 to 130	0.185	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY13783

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LCS	Rec	Prec
			Limit				Duplicate	Limit	Limit	Limit
	Filter Completion Date	Date								
AY13791	Solids, Dissolved	mg/L	-2.00	25			265	52.0	40 to 60	0.188 5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY13784

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	0.0110	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	2.32	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	J 0.0331	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	42.2	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	J 0.00655	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	221	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: Recovery for Barium was out of spec. The spike amount is less than 30% of the sample amount. SGC 7/6/18

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY13784

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AY13784	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0937	0.0918	0.101	0.085 to 0.115		93.7	70 to 130	2.06	20
AY13784	Boron, Total	mg/L	-0.000353	0.044	1.00	0.991	0.997	0.961	0.85 to 1.15		95.8	70 to 130	0.630	20
AY13784	Barium, Total	mg/L	0.0000122	0.0044	0.10	2.35	2.36	0.101	0.085 to 0.115		34.3	70 to 130	0.652	20
AY13784	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0956	0.0938	0.0978	0.085 to 0.115		95.6	70 to 130	1.84	20
AY13784	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.0977	0.102	0.102	0.085 to 0.115		97.7	70 to 130	4.61	20
AY13784	Calcium, Total	mg/L	0.000378	0.22	5.00	47.2	47.2	4.94	4.25 to 5.75		101	70 to 130	0.108	20
AY13784	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0974	0.100	0.103	0.085 to 0.115		97.4	70 to 130	2.86	20
AY13784	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.112	0.113	0.102	0.085 to 0.115		101	70 to 130	0.321	20
AY13784	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0971	0.1000	0.0970	0.085 to 0.115		97.1	70 to 130	2.87	20
AY13784	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.0979	0.101	0.0995	0.085 to 0.115		97.9	70 to 130	2.78	20
AY13784	Lithium, Total	mg/L	0.0000448	0.022	0.20	0.207	0.209	0.192	0.17 to 0.23		103	70 to 130	0.881	20
AY13784	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.102	0.104	0.105	0.085 to 0.115		102	70 to 130	1.29	20
AY13784	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0963	0.0919	0.0959	0.085 to 0.115		96.3	70 to 130	4.66	20
AY13784	Mercury, Total by CVAA	mg/L	0.0000353	0.0005	0.004	0.00400	0.00399	0.00402	0.0034 to 0.0046		100	70 to 130	0.453	20
AY13784	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.100	0.0999	0.0932	0.085 to 0.115		93.6	70 to 130	0.185	20

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: Recovery for Barium was out of spec. The spike amount is less than 30% of the sample amount. SGC 7/6/18

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY13784

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AY13791	Solids, Dissolved	mg/L	-2.00	25			265	52.0	40 to 60			0.188	5
	Filter Completion Date	Date											

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: Recovery for Barium was out of spec. The spike amount is less than 30% of the sample amount. SGC 7/6/18

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY13785

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0112	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	7.37	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	38.0	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY13785

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
				Limit	Spike					Rec	Limit		
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0932	0.0959	0.085 to 0.115	94.4	70 to 130	1.32	20
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00404	0.00402	0.0034 to 0.0046	101	70 to 130	0.168	20
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.0995	0.085 to 0.115	100	70 to 130	4.24	20
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.101	0.085 to 0.115	89.7	70 to 130	1.03	20
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.440	20
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.0978	0.085 to 0.115	92.4	70 to 130	0.208	20
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.103	0.085 to 0.115	97.8	70 to 130	1.60	20
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.192	0.17 to 0.23	96.7	70 to 130	0.986	20
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.58	20
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.101	0.085 to 0.115	99.5	70 to 130	4.44	20
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.974	0.85 to 1.15	96.7	70 to 130	0.208	20
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.102	0.085 to 0.115	102	70 to 130	7.65	20
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.94	4.25 to 5.75	98.1	70 to 130	0.928	20
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.0970	0.085 to 0.115	99.2	70 to 130	0.635	20
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.0932	0.085 to 0.115	90.7	70 to 130	1.74	20

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY13785

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LCS	Rec	Prec
			Limit				Duplicate	Limit	Limit	Limit
	Filter Completion Date	Date								
AY13791	Solids, Dissolved	mg/L	-2.00	25			265	52.0	40 to 60	0.188 5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY13786

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0323	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	76.5	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	248	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY13786

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00402	0.0034 to 0.0046	101	70 to 130	0.168	20	
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.085 to 0.115	100	70 to 130	4.24	20	
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.085 to 0.115	89.7	70 to 130	1.03	20	
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0959	0.085 to 0.115	94.4	70 to 130	1.32	20	
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.102	0.085 to 0.115	100	70 to 130	0.440	20	
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.085 to 0.115	92.4	70 to 130	0.208	20	
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.085 to 0.115	97.8	70 to 130	1.60	20	
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.17 to 0.23	96.7	70 to 130	0.986	20	
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.105	0.085 to 0.115	101	70 to 130	2.58	20	
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.085 to 0.115	99.5	70 to 130	4.44	20	
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.85 to 1.15	96.7	70 to 130	0.208	20	
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.085 to 0.115	102	70 to 130	7.65	20	
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.25 to 5.75	98.1	70 to 130	0.928	20	
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.085 to 0.115	99.2	70 to 130	0.635	20	
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.085 to 0.115	90.7	70 to 130	1.74	20	

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Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY13786

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY13791	Solids, Dissolved	mg/L	-2.00		25			265	52.0		40 to 60			0.188	5	
	Filter Completion Date	Date														

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY13787

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0291	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	45.2	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	205	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY13787

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0932	0.0959	0.085 to 0.115	94.4	70 to 130	1.32	20
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.0995	0.085 to 0.115	100	70 to 130	4.24	20
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00404	0.00402	0.0034 to 0.0046	101	70 to 130	0.168	20
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.101	0.085 to 0.115	89.7	70 to 130	1.03	20
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.440	20
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.0978	0.085 to 0.115	92.4	70 to 130	0.208	20
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.103	0.085 to 0.115	97.8	70 to 130	1.60	20
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.192	0.17 to 0.23	96.7	70 to 130	0.986	20
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.58	20
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.101	0.085 to 0.115	99.5	70 to 130	4.44	20
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.974	0.85 to 1.15	96.7	70 to 130	0.208	20
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.102	0.085 to 0.115	102	70 to 130	7.65	20
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.94	4.25 to 5.75	98.1	70 to 130	0.928	20
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.0970	0.085 to 0.115	99.2	70 to 130	0.635	20
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.0932	0.085 to 0.115	90.7	70 to 130	1.74	20

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Laboratory certification ID: E571114

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Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY13787

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LCS	Rec	Prec
			Limit				Duplicate	Limit	Limit	Limit
	Filter Completion Date	Date								
AY13791	Solids, Dissolved	mg/L	-2.00	25			265	52.0	40 to 60	0.188 5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY13788

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0286	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	78.9	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	284	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY13788

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS	Rec	Rec	Prec	Prec
				Limit	Spike								
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0932	0.0959	0.085 to 0.115	94.4	70 to 130	1.32	20
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00404	0.00402	0.0034 to 0.0046	101	70 to 130	0.168	20
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.0995	0.085 to 0.115	100	70 to 130	4.24	20
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.101	0.085 to 0.115	89.7	70 to 130	1.03	20
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.440	20
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.0978	0.085 to 0.115	92.4	70 to 130	0.208	20
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.103	0.085 to 0.115	97.8	70 to 130	1.60	20
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.192	0.17 to 0.23	96.7	70 to 130	0.986	20
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.58	20
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.101	0.085 to 0.115	99.5	70 to 130	4.44	20
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.974	0.85 to 1.15	96.7	70 to 130	0.208	20
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.102	0.085 to 0.115	102	70 to 130	7.65	20
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.94	4.25 to 5.75	98.1	70 to 130	0.928	20
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.0970	0.085 to 0.115	99.2	70 to 130	0.635	20
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.0932	0.085 to 0.115	90.7	70 to 130	1.74	20

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY13788

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	Rec	Prec	Prec	Limit	
								Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AY13791	Solids, Dissolved	mg/L	-2.00	25				265	52.0	40 to 60			0.188	5
	Filter Completion Date	Date												

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-6 Dup

Laboratory ID Number: AY13789

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0158	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	0.750	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/18/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CES	6/14/2018	SM 2540C		1			6/14/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-6 Dup

Laboratory ID Number: AY13789

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit	
				Limit	Spike				Limit	Rec	Limit	Prec			
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00404	0.00402	0.0034 to 0.0046		101	70 to 130		0.168	20
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.0995	0.085 to 0.115		100	70 to 130		4.24	20
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0932	0.0959	0.085 to 0.115		94.4	70 to 130		1.32	20
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.101	0.085 to 0.115		89.7	70 to 130		1.03	20
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.103	0.085 to 0.115		97.8	70 to 130		1.60	20
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.192	0.17 to 0.23		96.7	70 to 130		0.986	20
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115		101	70 to 130		2.58	20
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.101	0.102	0.085 to 0.115		100	70 to 130		0.440	20
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.0978	0.085 to 0.115		92.4	70 to 130		0.208	20
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.101	0.085 to 0.115		99.5	70 to 130		4.44	20
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.974	0.85 to 1.15		96.7	70 to 130		0.208	20
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.102	0.085 to 0.115		102	70 to 130		7.65	20
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.94	4.25 to 5.75		98.1	70 to 130		0.928	20
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.0970	0.085 to 0.115		99.2	70 to 130		0.635	20
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.0932	0.085 to 0.115		90.7	70 to 130		1.74	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-6 Dup

Laboratory ID Number: AY13789

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LCS	Rec	Prec
			Limit	Limit			Duplicate	Limit	Limit	Limit
	Filter Completion Date	Date								
AY13778	Solids, Dissolved	mg/L	3.00	25			188	48.0	40 to 60	0.535 5

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Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY13790

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/18/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CES	6/14/2018	SM 2540C		1			6/14/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY13790

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Limit	
			MB	Limit					Rec	Limit			
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.0995	0.085 to 0.115	100	70 to 130	4.24	20
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00404	0.00402	0.0034 to 0.0046	101	70 to 130	0.168	20
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.101	0.085 to 0.115	89.7	70 to 130	1.03	20
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0932	0.0959	0.085 to 0.115	94.4	70 to 130	1.32	20
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.440	20
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.0978	0.085 to 0.115	92.4	70 to 130	0.208	20
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.103	0.085 to 0.115	97.8	70 to 130	1.60	20
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.192	0.17 to 0.23	96.7	70 to 130	0.986	20
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.58	20
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.101	0.085 to 0.115	99.5	70 to 130	4.44	20
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.974	0.85 to 1.15	96.7	70 to 130	0.208	20
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.102	0.085 to 0.115	102	70 to 130	7.65	20
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.94	4.25 to 5.75	98.1	70 to 130	0.928	20
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.0970	0.085 to 0.115	99.2	70 to 130	0.635	20
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.0932	0.085 to 0.115	90.7	70 to 130	1.74	20

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Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 11-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY13790

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AY13778	Solids, Dissolved	mg/L	3.00	25			188	48.0	40 to 60			0.535	5
	Filter Completion Date	Date											

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-10 Dup

Laboratory ID Number: AY13791

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	0.0358	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/18/2018	EPA 200.7		10.15	1.015	5.075	106	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	266	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-10 Dup

Laboratory ID Number: AY13791

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	
			MB	Limit					Limit	Rec	Limit	Prec		
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.101	0.085 to 0.115		89.7	70 to 130	1.03	20
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00404	0.00402	0.0034 to 0.0046		101	70 to 130	0.168	20
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0932	0.0959	0.085 to 0.115		94.4	70 to 130	1.32	20
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.0995	0.085 to 0.115		100	70 to 130	4.24	20
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.101	0.102	0.085 to 0.115		100	70 to 130	0.440	20
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.0978	0.085 to 0.115		92.4	70 to 130	0.208	20
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.103	0.085 to 0.115		97.8	70 to 130	1.60	20
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.192	0.17 to 0.23		96.7	70 to 130	0.986	20
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115		101	70 to 130	2.58	20
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.101	0.085 to 0.115		99.5	70 to 130	4.44	20
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.974	0.85 to 1.15		96.7	70 to 130	0.208	20
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.102	0.085 to 0.115		102	70 to 130	7.65	20
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.94	4.25 to 5.75		98.1	70 to 130	0.928	20
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.0970	0.085 to 0.115		99.2	70 to 130	0.635	20
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.0932	0.085 to 0.115		90.7	70 to 130	1.74	20

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum - MW-10 Dup

Laboratory ID Number: AY13791

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	Rec	Prec	Prec	Limit	
								Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AY13791	Solids, Dissolved	mg/L	-2.00	25				265	52.0	40 to 60			0.188	5
	Filter Completion Date	Date												

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Expiration: June 30, 2019

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CC:

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 Calera, AL 35040
 (205) 664-6032 or 6171
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY13792

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY13792

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Limit	
			MB	Limit					Rec	Limit			
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.101	0.085 to 0.115	89.7	70 to 130	1.03	20
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.0995	0.085 to 0.115	100	70 to 130	4.24	20
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00404	0.00402	0.0034 to 0.0046	101	70 to 130	0.168	20
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0932	0.0959	0.085 to 0.115	94.4	70 to 130	1.32	20
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.440	20
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.0978	0.085 to 0.115	92.4	70 to 130	0.208	20
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.103	0.085 to 0.115	97.8	70 to 130	1.60	20
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.192	0.17 to 0.23	96.7	70 to 130	0.986	20
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.58	20
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.101	0.085 to 0.115	99.5	70 to 130	4.44	20
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.974	0.85 to 1.15	96.7	70 to 130	0.208	20
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.102	0.085 to 0.115	102	70 to 130	7.65	20
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.94	4.25 to 5.75	98.1	70 to 130	0.928	20
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.0970	0.085 to 0.115	99.2	70 to 130	0.635	20
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.0932	0.085 to 0.115	90.7	70 to 130	1.74	20

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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY13792

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY13791	Solids, Dissolved	mg/L	-2.00		25			265	52.0		40 to 60			0.188	5	
	Filter Completion Date	Date														

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY13793

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	6/15/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/27/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	6/15/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	6/15/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/22/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CES	6/19/2018	SM 2540C		1			6/19/18	Date

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Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY13793

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Limit
			MB	Limit					Rec	Limit		
AY13793	Mercury, Total by CVAA	mg/L	0.0000358	0.0005	0.004	0.00404	0.00402	0.0034 to 0.0046	101	70 to 130	0.168	20
AY13793	Antimony, Total	mg/L	0.0000912	0.00132	0.10	0.100	0.0962	0.085 to 0.115	100	70 to 130	4.24	20
AY13793	Beryllium, Total	mg/L	0.0000791	0.00132	0.10	0.0944	0.0959	0.085 to 0.115	94.4	70 to 130	1.32	20
AY13793	Arsenic, Total	mg/L	0.00000112	0.0022	0.10	0.100	0.102	0.085 to 0.115	100	70 to 130	0.440	20
AY13793	Lead, Total	mg/L	0.0000432	0.0022	0.10	0.0924	0.0926	0.085 to 0.115	92.4	70 to 130	0.208	20
AY13793	Cobalt, Total	mg/L	-0.0000197	0.0044	0.10	0.0978	0.0962	0.085 to 0.115	97.8	70 to 130	1.60	20
AY13793	Lithium, Total	mg/L	0.0000944	0.022	0.20	0.193	0.191	0.17 to 0.23	96.7	70 to 130	0.986	20
AY13793	Selenium, Total	mg/L	0.0000745	0.0044	0.10	0.101	0.105	0.085 to 0.115	101	70 to 130	2.58	20
AY13793	Thallium, Total	mg/L	0.0000241	0.00044	0.10	0.0897	0.0907	0.085 to 0.115	89.7	70 to 130	1.03	20
AY13793	Barium, Total	mg/L	0.0000122	0.0044	0.10	0.0995	0.0952	0.085 to 0.115	99.5	70 to 130	4.44	20
AY13793	Boron, Total	mg/L	0.00120	0.044	1.00	0.967	0.965	0.85 to 1.15	96.7	70 to 130	0.208	20
AY13793	Cadmium, Total	mg/L	-0.00000457	0.00066	0.10	0.102	0.0944	0.085 to 0.115	102	70 to 130	7.65	20
AY13793	Calcium, Total	mg/L	0.0435	0.22	5.00	4.90	4.86	4.25 to 5.75	98.1	70 to 130	0.928	20
AY13793	Chromium, Total	mg/L	-0.0000333	0.0044	0.10	0.0992	0.0985	0.085 to 0.115	99.2	70 to 130	0.635	20
AY13793	Molybdenum, Total	mg/L	0.00000860	0.0044	0.10	0.0907	0.0923	0.085 to 0.115	90.7	70 to 130	1.74	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 12-Jun-18
 Customer ID:
 Delivery Date: 13-Jun-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY13793

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY13791	Solids, Dissolved	mg/L	-2.00		25			265	52.0		40 to 60			0.188	5	
	Filter Completion Date	Date														

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Laboratory certification ID: E571114

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Comments:

CC:

Definitions



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

Qualifier	Description
B	Analyte found in reagent blank. Indicates possible reagent or background contamination.
E	Estimated reported value exceeded calibration range.
J	Reported value is an estimate because concentration is less than reporting limit.
N	Organic constituents tentatively identified. Confirmation is needed.
R	Matrix spike recovery is out of range.
U	Compound was analyzed, but not detected.
P	Precision is out of range.
C	Analyte was verified by re-analysis.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.
L	Check standard is outside of the required specification limit.
D	All samples were stored at less than or equal to 6 °C and for no longer than 48 hours from time of sampling, unless otherwise noted.
F	Water Field Group (WFG) qualifier; see comments for more information



Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA **06/13/2018 10:13**

Requested Complete Date Site Representative Collector	Routine	Results To	Dustin Brooks, Greg Dyer
	Tanisha Fenderson	Requested By	Greg Dyer
	Anthony Goggins	Location	Gaston Gypsum

Bottles	1	Metals	500 mL	3	TDS	500 mL	5	N/A	N/A	7	N/A	N/A
	2	Hg	250 mL	4	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	6/11/18	11:31	3	Groundwater		AY13775
MW-6	06/11/2018	12:24	3	Groundwater		AY13776
MW-7	06/11/2018	14:44	3	Groundwater		AY13777
MW-8	06/12/2018	08:51	3	Groundwater		AY13778
MW-9	06/12/2018	09:53	3	Groundwater		AY13779
MW-10	06/12/2018	10:51	3	Groundwater		AY13780
MW-11	06/12/2018	12:37	3	Groundwater		AY13781
MW-12	06/12/2018	13:33	3	Groundwater		AY13782
MW-13	06/12/2018	14:16	3	Groundwater		AY13783
MW-1	06/12/2018	15:03	3	Groundwater		AY13784
MW-15	06/12/2018	15:56	3	Groundwater		AY13785
MW-3	06/12/2018	17:45	3	Groundwater		AY13786
MW-14S	06/12/2018	18:56	3	Groundwater		AY13787
MW-2	06/12/2018	19:44	3	Groundwater		AY13788
MW-6DUP	06/11/2018	12:24	3	Sample Duplicate		AY13789
FB-1	06/11/2018	15:03	3	Field Blank		AY13790
MW-10DUP	06/12/2018	10:51	3	Sample Duplicate		AY13791
FB-2	06/12/2018	12:06	3	Field Blank		AY13792
EB-1	06/12/2018	20:11	3	Equipment Blank		AY13793

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernco.com, c=US Date: 2018.06.13 10:34:23 -05'00'</small>	06/13/2018 10:34

SmarTroll ID **4696-23443-3-2**
Turbidity ID **5160-26211-1-1**

All metals and radiological bottles have pH < 2
Cooler Temp **3.4 degrees C**
Thermometer ID **6603-34819-1-1**
pH Strip ID **6803-35849-20-10**



Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA **06/13/2018 10:12**

Requested Complete Date Site Representative Collector	Routine	Results To	Dustin Brooks, Greg Dyer
	Tanisha Fenderson	Requested By	Greg Dyer
	Anthony Goggins	Location	Gaston Gypsum

Bottles	1 Radium	1 L	3 N/A	N/A	5 N/A	N/A	7 N/A	N/A
	2 Anions	250 mL	4 N/A	N/A	6 N/A	N/A	8 N/A	N/A

Comments: Radium Duplicate MW-9. All samples outsourced to Test America.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	6/11/18	11:31	2	Groundwater		AY13794
MW-6	06/11/2018	12:24	2	Groundwater		AY13795
MW-7	06/11/2018	14:44	2	Groundwater		AY13796
MW-8	06/12/2018	08:51	2	Groundwater		AY13797
MW-9	06/12/2018	09:53	4	Groundwater		AY13798
MW-10	06/12/2018	10:51	2	Groundwater		AY13799
MW-11	06/12/2018	12:37	2	Groundwater		AY13800
MW-12	06/12/2018	13:33	2	Groundwater		AY13801
MW-13	06/12/2018	14:16	2	Groundwater		AY13802
MW-1	06/12/2018	15:03	2	Groundwater		AY13803
MW-15	06/12/2018	15:56	2	Groundwater		AY13804
MW-3	06/12/2018	17:45	2	Groundwater		AY13805
MW-14S	06/12/2018	18:56	2	Groundwater		AY13806
MW-2	06/12/2018	19:44	2	Groundwater		AY13807
MW-6DUP	06/11/2018	12:24	2	Sample Duplicate		AY13808
FB-1	06/11/2018	15:03	2	Field Blank		AY13809
MW-10DUP	06/12/2018	10:51	2	Sample Duplicate		AY13810
FB-2	06/12/2018	12:06	2	Field Blank		AY13811
EB-1	06/12/2018	20:11	2	Equipment Blank		AY13812

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou., email=sgcopela@southernco.com, c=US Date: 2018.06.13 10:32:28 -05'00'</small>	06/13/2018 10:32

SmarTroll ID **4696-23443-3-2**
Turbidity ID **5160-26211-1-1**

All metals and radiological bottles have pH < 2
Cooler Temp **3.4 degrees C**
Thermometer ID **6603-34819-1-1**
pH Strip ID **6803-35849-20-10**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-155116-1

TestAmerica Sample Delivery Group: Gaston Gypsum 1155

Client Project/Site: CCR Plant Gaston

For:

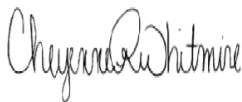
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

6/30/2018 11:53:27 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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

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Case Narrative

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Job ID: 400-155116-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-155116-1

General Chemistry

Method(s) SM 4500 SO4 E: The following sample was diluted to bring the concentration of target analytes within the calibration range: AY13794 MW-5 (400-155116-1). Elevated reporting limits (RLs) are provided.

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Detection Summary

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Client Sample ID: AY13794 MW-5

Lab Sample ID: 400-155116-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	47		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13795 MW-6

Lab Sample ID: 400-155116-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.7		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AY13796 MW-7

Lab Sample ID: 400-155116-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.6		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.090	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	7.5		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13797 MW-8

Lab Sample ID: 400-155116-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.9	J	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.13		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	2.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13798 MW-9

Lab Sample ID: 400-155116-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.6		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	5.7		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13799 MW-10

Lab Sample ID: 400-155116-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13800 MW-11

Lab Sample ID: 400-155116-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13801 MW-12

Lab Sample ID: 400-155116-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	8.7		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13802 MW-13

Lab Sample ID: 400-155116-9

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Client Sample ID: AY13802 MW-13 (Continued)

Lab Sample ID: 400-155116-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	8.3		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13803 MW-1

Lab Sample ID: 400-155116-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.32		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	4.2	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13804 MW-15

Lab Sample ID: 400-155116-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.3	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13805 MW-3

Lab Sample ID: 400-155116-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	14		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13806 MW-14S

Lab Sample ID: 400-155116-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.6		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	5.0		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13807 MW-2

Lab Sample ID: 400-155116-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	7.2		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY13808 MW-6 DUP

Lab Sample ID: 400-155116-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AY13809 FB-1

Lab Sample ID: 400-155116-16

No Detections.

Client Sample ID: AY13810 MW-10 DUP

Lab Sample ID: 400-155116-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Client Sample ID: AY13811 FB-2

Lab Sample ID: 400-155116-18

No Detections.

Client Sample ID: AY13812 EB-1

Lab Sample ID: 400-155116-19

No Detections.

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This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Method	Method Description	Protocol	Laboratory
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN
SM 4500 F C	Fluoride	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

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Sample Summary

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-155116-1	AY13794 MW-5	Water	06/11/18 11:31	06/15/18 09:03
400-155116-2	AY13795 MW-6	Water	06/11/18 12:24	06/15/18 09:03
400-155116-3	AY13796 MW-7	Water	06/11/18 14:44	06/15/18 09:03
400-155116-4	AY13797 MW-8	Water	06/12/18 08:51	06/15/18 09:03
400-155116-5	AY13798 MW-9	Water	06/12/18 09:53	06/15/18 09:03
400-155116-6	AY13799 MW-10	Water	06/12/18 10:51	06/15/18 09:03
400-155116-7	AY13800 MW-11	Water	06/12/18 12:37	06/15/18 09:03
400-155116-8	AY13801 MW-12	Water	06/12/18 13:33	06/15/18 09:03
400-155116-9	AY13802 MW-13	Water	06/12/18 14:16	06/15/18 09:03
400-155116-10	AY13803 MW-1	Water	06/12/18 15:03	06/15/18 09:03
400-155116-11	AY13804 MW-15	Water	06/12/18 15:56	06/15/18 09:03
400-155116-12	AY13805 MW-3	Water	06/12/18 17:45	06/15/18 09:03
400-155116-13	AY13806 MW-14S	Water	06/12/18 18:56	06/15/18 09:03
400-155116-14	AY13807 MW-2	Water	06/12/18 19:44	06/15/18 09:03
400-155116-15	AY13808 MW-6 DUP	Water	06/11/18 12:24	06/15/18 09:03
400-155116-16	AY13809 FB-1	Water	06/11/18 15:03	06/15/18 09:03
400-155116-17	AY13810 MW-10 DUP	Water	06/12/18 10:51	06/15/18 09:03
400-155116-18	AY13811 FB-2	Water	06/12/18 12:06	06/15/18 09:03
400-155116-19	AY13812 EB-1	Water	06/12/18 20:11	06/15/18 09:03

Client Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13794 MW-5

Lab Sample ID: 400-155116-1

Date Collected: 06/11/18 11:31

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0	0.60	mg/L			06/26/18 14:28	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/22/18 14:39	1
Sulfate	47		10	2.8	mg/L			06/27/18 11:15	2

Client Sample ID: AY13795 MW-6

Lab Sample ID: 400-155116-2

Date Collected: 06/11/18 12:24

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.7		2.0	0.60	mg/L			06/26/18 14:28	1
Fluoride	<0.032		0.10	0.032	mg/L			06/22/18 14:43	1
Sulfate	<1.4		5.0	1.4	mg/L			06/27/18 09:55	1

Client Sample ID: AY13796 MW-7

Lab Sample ID: 400-155116-3

Date Collected: 06/11/18 14:44

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.6		2.0	0.60	mg/L			06/29/18 07:10	1
Fluoride	0.090	J	0.10	0.032	mg/L			06/22/18 14:47	1
Sulfate	7.5		5.0	1.4	mg/L			06/27/18 09:55	1

Client Sample ID: AY13797 MW-8

Lab Sample ID: 400-155116-4

Date Collected: 06/12/18 08:51

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9	J	2.0	0.60	mg/L			06/29/18 07:13	1
Fluoride	0.13		0.10	0.032	mg/L			06/22/18 15:32	1
Sulfate	2.7	J	5.0	1.4	mg/L			06/27/18 10:02	1

Client Sample ID: AY13798 MW-9

Lab Sample ID: 400-155116-5

Date Collected: 06/12/18 09:53

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		2.0	0.60	mg/L			06/29/18 07:13	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/25/18 10:18	1
Sulfate	5.7		5.0	1.4	mg/L			06/27/18 10:02	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13799 MW-10

Lab Sample ID: 400-155116-6

Date Collected: 06/12/18 10:51

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		2.0	0.60	mg/L			06/29/18 07:20	1
Fluoride	<0.032		0.10	0.032	mg/L			06/25/18 09:31	1
Sulfate	1.8	J	5.0	1.4	mg/L			06/28/18 09:26	1

Client Sample ID: AY13800 MW-11

Lab Sample ID: 400-155116-7

Date Collected: 06/12/18 12:37

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.8		2.0	0.60	mg/L			06/29/18 07:20	1
Fluoride	<0.032		0.10	0.032	mg/L			06/25/18 09:43	1
Sulfate	3.5	J	5.0	1.4	mg/L			06/28/18 09:26	1

Client Sample ID: AY13801 MW-12

Lab Sample ID: 400-155116-8

Date Collected: 06/12/18 13:33

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		2.0	0.60	mg/L			06/29/18 07:20	1
Fluoride	0.060	J	0.10	0.032	mg/L			06/25/18 09:47	1
Sulfate	8.7		5.0	1.4	mg/L			06/28/18 09:26	1

Client Sample ID: AY13802 MW-13

Lab Sample ID: 400-155116-9

Date Collected: 06/12/18 14:16

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		2.0	0.60	mg/L			06/29/18 07:20	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/25/18 09:50	1
Sulfate	8.3		5.0	1.4	mg/L			06/28/18 09:32	1

Client Sample ID: AY13803 MW-1

Lab Sample ID: 400-155116-10

Date Collected: 06/12/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4		2.0	0.60	mg/L			06/29/18 07:20	1
Fluoride	0.32		0.10	0.032	mg/L			06/25/18 09:54	1
Sulfate	4.2	J	5.0	1.4	mg/L			06/28/18 09:32	1

Client Sample ID: AY13804 MW-15

Lab Sample ID: 400-155116-11

Date Collected: 06/12/18 15:56

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.0		2.0	0.60	mg/L			06/29/18 07:20	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13804 MW-15

Lab Sample ID: 400-155116-11

Date Collected: 06/12/18 15:56

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			06/25/18 09:58	1
Sulfate	2.3	J	5.0	1.4	mg/L			06/28/18 09:32	1

Client Sample ID: AY13805 MW-3

Lab Sample ID: 400-155116-12

Date Collected: 06/12/18 17:45

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		2.0	0.60	mg/L			06/29/18 07:20	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/25/18 10:02	1
Sulfate	14		5.0	1.4	mg/L			06/28/18 09:32	1

Client Sample ID: AY13806 MW-14S

Lab Sample ID: 400-155116-13

Date Collected: 06/12/18 18:56

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.6		2.0	0.60	mg/L			06/29/18 07:20	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/25/18 10:06	1
Sulfate	5.0		5.0	1.4	mg/L			06/28/18 09:33	1

Client Sample ID: AY13807 MW-2

Lab Sample ID: 400-155116-14

Date Collected: 06/12/18 19:44

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.4		2.0	0.60	mg/L			06/29/18 07:20	1
Fluoride	<0.032		0.10	0.032	mg/L			06/25/18 10:27	1
Sulfate	7.2		5.0	1.4	mg/L			06/28/18 09:33	1

Client Sample ID: AY13808 MW-6 DUP

Lab Sample ID: 400-155116-15

Date Collected: 06/11/18 12:24

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.2		2.0	0.60	mg/L			06/29/18 07:10	1
Fluoride	<0.032		0.10	0.032	mg/L			06/22/18 14:59	1
Sulfate	<1.4		5.0	1.4	mg/L			06/27/18 09:55	1

Client Sample ID: AY13809 FB-1

Lab Sample ID: 400-155116-16

Date Collected: 06/11/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/29/18 07:10	1
Fluoride	<0.032		0.10	0.032	mg/L			06/22/18 15:07	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13809 FB-1

Lab Sample ID: 400-155116-16

Date Collected: 06/11/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			06/27/18 10:02	1

Client Sample ID: AY13810 MW-10 DUP

Lab Sample ID: 400-155116-17

Date Collected: 06/12/18 10:51

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		2.0	0.60	mg/L			06/29/18 08:27	1
Fluoride	<0.032		0.10	0.032	mg/L			06/25/18 10:31	1
Sulfate	1.8	J	5.0	1.4	mg/L			06/28/18 09:33	1

Client Sample ID: AY13811 FB-2

Lab Sample ID: 400-155116-18

Date Collected: 06/12/18 12:06

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/29/18 08:27	1
Fluoride	<0.032		0.10	0.032	mg/L			06/25/18 10:34	1
Sulfate	<1.4		5.0	1.4	mg/L			06/28/18 09:37	1

Client Sample ID: AY13812 EB-1

Lab Sample ID: 400-155116-19

Date Collected: 06/12/18 20:11

Matrix: Water

Date Received: 06/15/18 09:03

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/29/18 08:30	1
Fluoride	<0.032		0.10	0.032	mg/L			06/25/18 10:38	1
Sulfate	<1.4		5.0	1.4	mg/L			06/28/18 09:37	1

Definitions/Glossary

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13794 MW-5

Lab Sample ID: 400-155116-1

Date Collected: 06/11/18 11:31

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402581	06/26/18 14:28	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402217	06/22/18 14:39	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	402758	06/27/18 11:15	RRC	TAL PEN

Client Sample ID: AY13795 MW-6

Lab Sample ID: 400-155116-2

Date Collected: 06/11/18 12:24

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402581	06/26/18 14:28	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402217	06/22/18 14:43	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402758	06/27/18 09:55	RRC	TAL PEN

Client Sample ID: AY13796 MW-7

Lab Sample ID: 400-155116-3

Date Collected: 06/11/18 14:44

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:10	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402217	06/22/18 14:47	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402758	06/27/18 09:55	RRC	TAL PEN

Client Sample ID: AY13797 MW-8

Lab Sample ID: 400-155116-4

Date Collected: 06/12/18 08:51

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:13	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402217	06/22/18 15:32	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402758	06/27/18 10:02	RRC	TAL PEN

Client Sample ID: AY13798 MW-9

Lab Sample ID: 400-155116-5

Date Collected: 06/12/18 09:53

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:13	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 10:18	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402758	06/27/18 10:02	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Client Sample ID: AY13799 MW-10

Lab Sample ID: 400-155116-6

Date Collected: 06/12/18 10:51

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 09:31	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:26	RRC	TAL PEN

Client Sample ID: AY13800 MW-11

Lab Sample ID: 400-155116-7

Date Collected: 06/12/18 12:37

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 09:43	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:26	RRC	TAL PEN

Client Sample ID: AY13801 MW-12

Lab Sample ID: 400-155116-8

Date Collected: 06/12/18 13:33

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 09:47	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:26	RRC	TAL PEN

Client Sample ID: AY13802 MW-13

Lab Sample ID: 400-155116-9

Date Collected: 06/12/18 14:16

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 09:50	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:32	RRC	TAL PEN

Client Sample ID: AY13803 MW-1

Lab Sample ID: 400-155116-10

Date Collected: 06/12/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 09:54	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:32	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

Client Sample ID: AY13804 MW-15

Lab Sample ID: 400-155116-11

Date Collected: 06/12/18 15:56

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 09:58	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:32	RRC	TAL PEN

Client Sample ID: AY13805 MW-3

Lab Sample ID: 400-155116-12

Date Collected: 06/12/18 17:45

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 10:02	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:32	RRC	TAL PEN

Client Sample ID: AY13806 MW-14S

Lab Sample ID: 400-155116-13

Date Collected: 06/12/18 18:56

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 10:06	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:33	RRC	TAL PEN

Client Sample ID: AY13807 MW-2

Lab Sample ID: 400-155116-14

Date Collected: 06/12/18 19:44

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 10:27	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:33	RRC	TAL PEN

Client Sample ID: AY13808 MW-6 DUP

Lab Sample ID: 400-155116-15

Date Collected: 06/11/18 12:24

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:10	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402217	06/22/18 14:59	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402758	06/27/18 09:55	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13809 FB-1

Lab Sample ID: 400-155116-16

Date Collected: 06/11/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402962	06/29/18 07:10	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402217	06/22/18 15:07	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402758	06/27/18 10:02	RRC	TAL PEN

Client Sample ID: AY13810 MW-10 DUP

Lab Sample ID: 400-155116-17

Date Collected: 06/12/18 10:51

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402992	06/29/18 08:27	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 10:31	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:33	RRC	TAL PEN

Client Sample ID: AY13811 FB-2

Lab Sample ID: 400-155116-18

Date Collected: 06/12/18 12:06

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402992	06/29/18 08:27	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 10:34	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:37	RRC	TAL PEN

Client Sample ID: AY13812 EB-1

Lab Sample ID: 400-155116-19

Date Collected: 06/12/18 20:11

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	402992	06/29/18 08:30	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	402401	06/25/18 10:38	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	402845	06/28/18 09:37	RRC	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

General Chemistry

Analysis Batch: 402217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-1	AY13794 MW-5	Total/NA	Water	SM 4500 F C	
400-155116-2	AY13795 MW-6	Total/NA	Water	SM 4500 F C	
400-155116-3	AY13796 MW-7	Total/NA	Water	SM 4500 F C	
400-155116-4	AY13797 MW-8	Total/NA	Water	SM 4500 F C	
400-155116-15	AY13808 MW-6 DUP	Total/NA	Water	SM 4500 F C	
400-155116-16	AY13809 FB-1	Total/NA	Water	SM 4500 F C	
MB 400-402217/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-402217/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-155116-15 DU	AY13808 MW-6 DUP	Total/NA	Water	SM 4500 F C	

Analysis Batch: 402401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-5	AY13798 MW-9	Total/NA	Water	SM 4500 F C	
400-155116-6	AY13799 MW-10	Total/NA	Water	SM 4500 F C	
400-155116-7	AY13800 MW-11	Total/NA	Water	SM 4500 F C	
400-155116-8	AY13801 MW-12	Total/NA	Water	SM 4500 F C	
400-155116-9	AY13802 MW-13	Total/NA	Water	SM 4500 F C	
400-155116-10	AY13803 MW-1	Total/NA	Water	SM 4500 F C	
400-155116-11	AY13804 MW-15	Total/NA	Water	SM 4500 F C	
400-155116-12	AY13805 MW-3	Total/NA	Water	SM 4500 F C	
400-155116-13	AY13806 MW-14S	Total/NA	Water	SM 4500 F C	
400-155116-14	AY13807 MW-2	Total/NA	Water	SM 4500 F C	
400-155116-17	AY13810 MW-10 DUP	Total/NA	Water	SM 4500 F C	
400-155116-18	AY13811 FB-2	Total/NA	Water	SM 4500 F C	
400-155116-19	AY13812 EB-1	Total/NA	Water	SM 4500 F C	
MB 400-402401/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-402401/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-155116-6 MS	AY13799 MW-10	Total/NA	Water	SM 4500 F C	
400-155116-6 MSD	AY13799 MW-10	Total/NA	Water	SM 4500 F C	
400-155116-5 DU	AY13798 MW-9	Total/NA	Water	SM 4500 F C	

Analysis Batch: 402581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-1	AY13794 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-155116-2	AY13795 MW-6	Total/NA	Water	SM 4500 Cl- E	
MB 400-402581/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-402581/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-402581/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-154556-A-2 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-154556-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 402758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-1	AY13794 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-155116-2	AY13795 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-155116-3	AY13796 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-155116-4	AY13797 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-155116-5	AY13798 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-155116-15	AY13808 MW-6 DUP	Total/NA	Water	SM 4500 SO4 E	
400-155116-16	AY13809 FB-1	Total/NA	Water	SM 4500 SO4 E	
MB 400-402758/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

General Chemistry (Continued)

Analysis Batch: 402758 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-402758/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-402758/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-154588-A-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-154588-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
400-155115-A-4 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-155115-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
400-155116-5 DU	AY13798 MW-9	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 402845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-6	AY13799 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-155116-7	AY13800 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-155116-8	AY13801 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-155116-9	AY13802 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-155116-10	AY13803 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-155116-11	AY13804 MW-15	Total/NA	Water	SM 4500 SO4 E	
400-155116-12	AY13805 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-155116-13	AY13806 MW-14S	Total/NA	Water	SM 4500 SO4 E	
400-155116-14	AY13807 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-155116-17	AY13810 MW-10 DUP	Total/NA	Water	SM 4500 SO4 E	
400-155116-18	AY13811 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-155116-19	AY13812 EB-1	Total/NA	Water	SM 4500 SO4 E	
MB 400-402845/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-402845/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-402845/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-155116-6 MS	AY13799 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-155116-6 MSD	AY13799 MW-10	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 402962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-3	AY13796 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-155116-4	AY13797 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-155116-5	AY13798 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-155116-6	AY13799 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-155116-7	AY13800 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-155116-8	AY13801 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-155116-9	AY13802 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-155116-10	AY13803 MW-1	Total/NA	Water	SM 4500 Cl- E	
400-155116-11	AY13804 MW-15	Total/NA	Water	SM 4500 Cl- E	
400-155116-12	AY13805 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-155116-13	AY13806 MW-14S	Total/NA	Water	SM 4500 Cl- E	
400-155116-14	AY13807 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-155116-15	AY13808 MW-6 DUP	Total/NA	Water	SM 4500 Cl- E	
400-155116-16	AY13809 FB-1	Total/NA	Water	SM 4500 Cl- E	
MB 400-402962/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-402962/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-402962/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-155116-3 MS	AY13796 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-155116-3 MSD	AY13796 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-155116-5 DU	AY13798 MW-9	Total/NA	Water	SM 4500 Cl- E	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-155116-1
SDG: Gaston Gypsum 1155

General Chemistry (Continued)

Analysis Batch: 402992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-17	AY13810 MW-10 DUP	Total/NA	Water	SM 4500 Cl- E	
400-155116-18	AY13811 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-155116-19	AY13812 EB-1	Total/NA	Water	SM 4500 Cl- E	
MB 400-402992/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-402992/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-402992/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-155154-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-155154-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

QC Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-402581/6
Matrix: Water
Analysis Batch: 402581

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/26/18 14:25	1

Lab Sample ID: LCS 400-402581/7
Matrix: Water
Analysis Batch: 402581

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.9		mg/L		103	90 - 110

Lab Sample ID: MRL 400-402581/3
Matrix: Water
Analysis Batch: 402581

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.39	J	mg/L		70	50 - 150

Lab Sample ID: 400-154556-A-2 MS
Matrix: Water
Analysis Batch: 402581

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	15		10.0	24.8		mg/L		101	73 - 120

Lab Sample ID: 400-154556-A-2 MSD
Matrix: Water
Analysis Batch: 402581

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	15		10.0	24.4		mg/L		98	73 - 120	1	8

Lab Sample ID: MB 400-402962/6
Matrix: Water
Analysis Batch: 402962

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/29/18 07:10	1

Lab Sample ID: LCS 400-402962/7
Matrix: Water
Analysis Batch: 402962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.3		mg/L		104	90 - 110

Lab Sample ID: MRL 400-402962/3
Matrix: Water
Analysis Batch: 402962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.95	J	mg/L		98	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Lab Sample ID: 400-155116-3 MS
Matrix: Water
Analysis Batch: 402962

Client Sample ID: AY13796 MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.6		10.0	15.4		mg/L		118	73 - 120

Lab Sample ID: 400-155116-3 MSD
Matrix: Water
Analysis Batch: 402962

Client Sample ID: AY13796 MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.6		10.0	15.5		mg/L		119	73 - 120	1	8

Lab Sample ID: 400-155116-5 DU
Matrix: Water
Analysis Batch: 402962

Client Sample ID: AY13798 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	2.6		2.69		mg/L		2	8

Lab Sample ID: MB 400-402992/6
Matrix: Water
Analysis Batch: 402992

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/29/18 08:27	1

Lab Sample ID: LCS 400-402992/7
Matrix: Water
Analysis Batch: 402992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.5		mg/L		105	90 - 110

Lab Sample ID: MRL 400-402992/3
Matrix: Water
Analysis Batch: 402992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.80	J	mg/L		90	50 - 150

Lab Sample ID: 400-155154-A-1 MS
Matrix: Water
Analysis Batch: 402992

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	17		10.0	27.1		mg/L		97	73 - 120

Lab Sample ID: 400-155154-A-1 MSD
Matrix: Water
Analysis Batch: 402992

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	17		10.0	27.1		mg/L		97	73 - 120	0	8

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-402217/3
Matrix: Water
Analysis Batch: 402217

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			06/22/18 13:35	1

Lab Sample ID: LCS 400-402217/4
Matrix: Water
Analysis Batch: 402217

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.79		mg/L		95	90 - 110

Lab Sample ID: 400-155116-15 DU
Matrix: Water
Analysis Batch: 402217

Client Sample ID: AY13808 MW-6 DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	<0.032		<0.032		mg/L		NC	4

Lab Sample ID: MB 400-402401/3
Matrix: Water
Analysis Batch: 402401

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			06/25/18 09:11	1

Lab Sample ID: LCS 400-402401/4
Matrix: Water
Analysis Batch: 402401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.87		mg/L		97	90 - 110

Lab Sample ID: 400-155116-6 MS
Matrix: Water
Analysis Batch: 402401

Client Sample ID: AY13799 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	0.980		mg/L		98	75 - 125

Lab Sample ID: 400-155116-6 MSD
Matrix: Water
Analysis Batch: 402401

Client Sample ID: AY13799 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	1.02		mg/L		102	75 - 125	4	4

Lab Sample ID: 400-155116-5 DU
Matrix: Water
Analysis Batch: 402401

Client Sample ID: AY13798 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.040	J	0.0400	J	mg/L		0	4

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-402758/6
Matrix: Water
Analysis Batch: 402758

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			06/27/18 09:48	1

Lab Sample ID: LCS 400-402758/7
Matrix: Water
Analysis Batch: 402758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.3		mg/L		102	90 - 110

Lab Sample ID: MRL 400-402758/3
Matrix: Water
Analysis Batch: 402758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	5.36		mg/L		107	50 - 150

Lab Sample ID: 400-154588-A-2 MS
Matrix: Water
Analysis Batch: 402758

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	11.6		mg/L		116	77 - 128

Lab Sample ID: 400-154588-A-2 MSD
Matrix: Water
Analysis Batch: 402758

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	<1.4		10.0	11.7		mg/L		117	77 - 128	1	5

Lab Sample ID: 400-155115-A-4 MS
Matrix: Water
Analysis Batch: 402758

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	11.2		mg/L		112	77 - 128

Lab Sample ID: 400-155115-A-4 MSD
Matrix: Water
Analysis Batch: 402758

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	<1.4		10.0	11.1		mg/L		111	77 - 128	0	5

QC Sample Results

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-155116-5 DU
Matrix: Water
Analysis Batch: 402758

Client Sample ID: AY13798 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Sulfate	5.7		5.73		mg/L		0.3	5

Lab Sample ID: MB 400-402845/6
Matrix: Water
Analysis Batch: 402845

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			06/28/18 09:26	1

Lab Sample ID: LCS 400-402845/7
Matrix: Water
Analysis Batch: 402845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.1		mg/L		101	90 - 110

Lab Sample ID: MRL 400-402845/3
Matrix: Water
Analysis Batch: 402845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	5.56		mg/L		111	50 - 150

Lab Sample ID: 400-155116-6 MS
Matrix: Water
Analysis Batch: 402845

Client Sample ID: AY13799 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.8	J	10.0	12.9		mg/L		111	77 - 128

Lab Sample ID: 400-155116-6 MSD
Matrix: Water
Analysis Batch: 402845

Client Sample ID: AY13799 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	1.8	J	10.0	12.9		mg/L		111	77 - 128	0	5

Chain of Custody Record

Client Information		Lab PM Whitmore, Chayenne R		Carrier Tracking No(s)	
Client Contact Sarah Copeland		E-Mail: Chayenne.whitmore@testamericainc.com			
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		COC No: 400-56525-24537.1	
City: Callera		State, Zip: AL 35040		Page: Page 1 of 2	
Phone: 205-664-5121 (Tel)		PO #:		Job #: 155116	
Email: sgcopella@southernco.com		MO #:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NH4SO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Project #: 40007143		Project Name: Gaston Gypsum 1155		M - Heptane N - None O - MHA/O2 P - Na2O4S Q - Na2SO4S R - Na2SO3 S - H2SO4 T - TSP Dodecylsulfate U - Acetone V - NCA W - pH 4.5 Z - other (specify)	
CCR: SSOVR		Site: Gaston Gypsum 1155		Total Number of containers	
Due Date Requested:		Date Requested:		Special Instructions/Note:	
TAT Requested (days):		Routine			
Sample Date		Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Hydrocarbons, Metals, Organics, PFAS, Trace, Acids)	Preservation Code:
AY13794	6/1/18	1131	G	Water	
AY13795	6/1/18	1224	G	Water	
AY13796	6/1/18	1444	G	Water	
AY13797	6/12/18	0851	G	Water	
AY13798	6/12/18	0953	G	Water	
AY13799	6/12/18	1051	G	Water	
AY13800	6/12/18	1237	G	Water	
AY13801	6/12/18	1333	G	Water	
AY13802	6/12/18	1416	G	Water	
AY13803	6/12/18	1503	G	Water	
Perform M/S/MSD (Yes or No)		Field Filtered Sample (Yes or No)		Total Number of containers	
N		Y		2	
SM 4500 F.C		SM 4500 Cl ₂		SM 4500 SO4 ²⁻	
9315_Ra229, 9320_Ra229, Ra229, Ra229a229_GFPc				400-155116 COC	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QCC Requirements:	
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by: Sarah Copeland		Date/Time: 6/14/2018: 0800		Company: APC	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Date/Time: 6-15-18 9:03 Received by: <i>S. Whitmore</i> Cooled Temperature(s) °C and Other Remarks: 5.6°C, 4.2°C, 3.7°C 1R-8	



Chain of Custody Record

Client Information		Lab PM Whitmore, Cheyenne R		Contact Tracking Note								
Client Contact Sarah Copeland		E-Mail: cheyenne.whitmore@testamericainc.com		COC No: 400-56525-24537.1								
Company: Alabama Power General Test Laboratory		Due Date Requested:		Page Page 2 of 2								
Address: 744 County Rd 87 GSC #8		TAT Requested (days):		Job #: 155116								
City: Cabela		Routine		Preservation Codes: M - Hexane A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amelcor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:								
State, Zip: AL, 35040		PO #:		Total Number of Containers								
Phone: 205-564-5121(Tel)		WO #:		Special Instructions/Note:								
Email: SjCopella@southernco.com		Project #: 40007143										
Project Name: CCR		ISDWR:										
Site: Gaston Gypsum 1155												
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Urine, Blood, etc)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F.C	SM 4500 CLE	SM 4500 SQA.E	9315 Ra226, 9320 Ra226, Ra226Ra228, 93PC	Analysis Requested	Method of Shipment:
AY13804	6/12/18	1556	G	Water	X	N	X	X	X	X		Received by:
AY13805	6/12/18	1745	G	Water	X	X	X	X	X	X		Date/Time: 6/14/2018: 0800
AY13806	6/12/18	1856	G	Water	X	X	X	X	X	X		Company APC
AY13807	6/12/18	1944	G	Water	X	X	X	X	X	X		Received by:
AY13808	6/11/18	1224	G	Water	X	X	X	X	X	X		Date/Time:
AY13809	6/11/18	1503	G	Water	X	X	X	X	X	X		Date/Time:
AY13810	6/12/18	1051	G	Water	X	X	X	X	X	X		Date/Time:
AY13811	6/12/18	1206	G	Water	X	X	X	X	X	X		Date/Time:
AY13812	6/12/18	2011	G	Water	X	X	X	X	X	X		Date/Time:
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)												
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months												
Special Instructions/QC Requirements:												
Relinquished by: Sarah Copeland Date: 6-15-18 903 Company: TA-PEN												



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-155116-1
SDG Number: Gaston Gypsum 1155

Login Number: 155116

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.6°C 4.2°C 3.7°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-155116-1
 SDG: Gaston Gypsum 1155

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18 *
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	State Program	9	2510	06-30-18 *
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-18 *
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-18 *
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-14	09-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-18 *

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-155116-2

TestAmerica Sample Delivery Group: Gaston Gypsum 1155

Client Project/Site: CCR Plant Gaston

For:

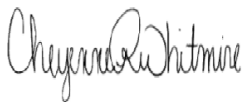
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

7/24/2018 5:03:59 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

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

TestAmerica Job ID: 400-155116-2
SDG: Gaston Gypsum 1155

Job ID: 400-155116-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-155116-2

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-372831: Sample aliquots reduced due to limited sample volume. AY13794 MW-5 (400-155116-1), AY13795 MW-6 (400-155116-2), AY13796 MW-7 (400-155116-3), AY13797 MW-8 (400-155116-4), AY13798 MW-9 (400-155116-5), AY13798 MW-9 (400-155116-5[DU]), AY13799 MW-10 (400-155116-6), AY13800 MW-11 (400-155116-7), AY13801 MW-12 (400-155116-8), AY13802 MW-13 (400-155116-9), AY13803 MW-1 (400-155116-10), AY13804 MW-15 (400-155116-11), AY13805 MW-3 (400-155116-12), AY13806 MW-14S (400-155116-13), AY13807 MW-2 (400-155116-14), AY13808 MW-6 DUP (400-155116-15), AY13809 FB-1 (400-155116-16), AY13810 MW-10 DUP (400-155116-17), AY13811 FB-2 (400-155116-18) and AY13812 EB-1 (400-155116-19)

Method(s) PrecSep-21: Radium 226 Prep Batch 160-372801: Sample aliquots reduced due to limited sample volume. AY13794 MW-5 (400-155116-1), AY13795 MW-6 (400-155116-2), AY13796 MW-7 (400-155116-3), AY13797 MW-8 (400-155116-4), AY13798 MW-9 (400-155116-5), AY13798 MW-9 (400-155116-5[DU]), AY13799 MW-10 (400-155116-6), AY13800 MW-11 (400-155116-7), AY13801 MW-12 (400-155116-8), AY13802 MW-13 (400-155116-9), AY13803 MW-1 (400-155116-10), AY13804 MW-15 (400-155116-11), AY13805 MW-3 (400-155116-12), AY13806 MW-14S (400-155116-13), AY13807 MW-2 (400-155116-14), AY13808 MW-6 DUP (400-155116-15), AY13809 FB-1 (400-155116-16), AY13810 MW-10 DUP (400-155116-17), AY13811 FB-2 (400-155116-18) and AY13812 EB-1 (400-155116-19)

Method Summary

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

TestAmerica Job ID: 400-155116-2
SDG: Gaston Gypsum 1155

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

Protocol References:

None = None

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

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

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-155116-2
SDG: Gaston Gypsum 1155

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-155116-1	AY13794 MW-5	Water	06/11/18 11:31	06/15/18 09:03
400-155116-2	AY13795 MW-6	Water	06/11/18 12:24	06/15/18 09:03
400-155116-3	AY13796 MW-7	Water	06/11/18 14:44	06/15/18 09:03
400-155116-4	AY13797 MW-8	Water	06/12/18 08:51	06/15/18 09:03
400-155116-5	AY13798 MW-9	Water	06/12/18 09:53	06/15/18 09:03
400-155116-6	AY13799 MW-10	Water	06/12/18 10:51	06/15/18 09:03
400-155116-7	AY13800 MW-11	Water	06/12/18 12:37	06/15/18 09:03
400-155116-8	AY13801 MW-12	Water	06/12/18 13:33	06/15/18 09:03
400-155116-9	AY13802 MW-13	Water	06/12/18 14:16	06/15/18 09:03
400-155116-10	AY13803 MW-1	Water	06/12/18 15:03	06/15/18 09:03
400-155116-11	AY13804 MW-15	Water	06/12/18 15:56	06/15/18 09:03
400-155116-12	AY13805 MW-3	Water	06/12/18 17:45	06/15/18 09:03
400-155116-13	AY13806 MW-14S	Water	06/12/18 18:56	06/15/18 09:03
400-155116-14	AY13807 MW-2	Water	06/12/18 19:44	06/15/18 09:03
400-155116-15	AY13808 MW-6 DUP	Water	06/11/18 12:24	06/15/18 09:03
400-155116-16	AY13809 FB-1	Water	06/11/18 15:03	06/15/18 09:03
400-155116-17	AY13810 MW-10 DUP	Water	06/12/18 10:51	06/15/18 09:03
400-155116-18	AY13811 FB-2	Water	06/12/18 12:06	06/15/18 09:03
400-155116-19	AY13812 EB-1	Water	06/12/18 20:11	06/15/18 09:03

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13794 MW-5

Lab Sample ID: 400-155116-1

Date Collected: 06/11/18 11:31

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.193	U	0.190	0.190	1.00	0.287	pCi/L	06/27/18 08:48	07/19/18 21:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/27/18 08:48	07/19/18 21:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.383	U	0.303	0.305	1.00	0.479	pCi/L	06/27/18 12:02	07/19/18 13:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/27/18 12:02	07/19/18 13:23	1
Y Carrier	87.9		40 - 110					06/27/18 12:02	07/19/18 13:23	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.577		0.358	0.359	5.00	0.479	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13795 MW-6

Lab Sample ID: 400-155116-2

Date Collected: 06/11/18 12:24

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.321		0.224	0.226	1.00	0.299	pCi/L	06/27/18 08:48	07/19/18 21:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/27/18 08:48	07/19/18 21:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.116	U	0.248	0.248	1.00	0.426	pCi/L	06/27/18 12:02	07/19/18 13:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/27/18 12:02	07/19/18 13:24	1
Y Carrier	90.8		40 - 110					06/27/18 12:02	07/19/18 13:24	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.436		0.334	0.336	5.00	0.426	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13796 MW-7

Lab Sample ID: 400-155116-3

Date Collected: 06/11/18 14:44

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0218	U	0.143	0.143	1.00	0.296	pCi/L	06/27/18 08:48	07/19/18 21:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/27/18 08:48	07/19/18 21:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.177	U	0.254	0.255	1.00	0.426	pCi/L	06/27/18 12:02	07/19/18 13:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/27/18 12:02	07/19/18 13:24	1
Y Carrier	90.8		40 - 110					06/27/18 12:02	07/19/18 13:24	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.199	U	0.291	0.292	5.00	0.426	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13797 MW-8

Lab Sample ID: 400-155116-4

Date Collected: 06/12/18 08:51

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0389	U	0.145	0.145	1.00	0.338	pCi/L	06/27/18 08:48	07/19/18 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					06/27/18 08:48	07/19/18 21:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.363	U	0.285	0.287	1.00	0.449	pCi/L	06/27/18 12:02	07/19/18 13:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					06/27/18 12:02	07/19/18 13:28	1
Y Carrier	89.7		40 - 110					06/27/18 12:02	07/19/18 13:28	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.324	U	0.320	0.322	5.00	0.449	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13798 MW-9

Lab Sample ID: 400-155116-5

Date Collected: 06/12/18 09:53

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0585	U	0.167	0.167	1.00	0.320	pCi/L	06/27/18 08:48	07/19/18 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/27/18 08:48	07/19/18 21:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0829	U	0.273	0.273	1.00	0.476	pCi/L	06/27/18 12:02	07/19/18 13:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/27/18 12:02	07/19/18 13:28	1
Y Carrier	87.9		40 - 110					06/27/18 12:02	07/19/18 13:28	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.141	U	0.320	0.320	5.00	0.476	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13799 MW-10

Lab Sample ID: 400-155116-6

Date Collected: 06/12/18 10:51

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0225	U	0.130	0.130	1.00	0.302	pCi/L	06/27/18 08:48	07/19/18 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/27/18 08:48	07/19/18 21:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.241	U	0.278	0.279	1.00	0.457	pCi/L	06/27/18 12:02	07/19/18 13:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/27/18 12:02	07/19/18 13:28	1
Y Carrier	90.8		40 - 110					06/27/18 12:02	07/19/18 13:28	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.218	U	0.307	0.308	5.00	0.457	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13800 MW-11

Lab Sample ID: 400-155116-7

Date Collected: 06/12/18 12:37

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0327	U	0.148	0.148	1.00	0.300	pCi/L	06/27/18 08:48	07/19/18 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					06/27/18 08:48	07/19/18 21:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.536		0.299	0.303	1.00	0.442	pCi/L	06/27/18 12:02	07/19/18 13:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					06/27/18 12:02	07/19/18 13:28	1
Y Carrier	88.2		40 - 110					06/27/18 12:02	07/19/18 13:28	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.569		0.334	0.337	5.00	0.442	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13801 MW-12

Lab Sample ID: 400-155116-8

Date Collected: 06/12/18 13:33

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.174	U	0.189	0.189	1.00	0.296	pCi/L	06/27/18 08:48	07/19/18 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					06/27/18 08:48	07/19/18 21:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.148	U	0.276	0.277	1.00	0.471	pCi/L	06/27/18 12:02	07/19/18 13:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					06/27/18 12:02	07/19/18 13:29	1
Y Carrier	87.9		40 - 110					06/27/18 12:02	07/19/18 13:29	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.321	U	0.335	0.335	5.00	0.471	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13802 MW-13

Lab Sample ID: 400-155116-9

Date Collected: 06/12/18 14:16

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0101	U	0.139	0.139	1.00	0.299	pCi/L	06/27/18 08:48	07/19/18 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/27/18 08:48	07/19/18 21:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0483	U	0.232	0.232	1.00	0.432	pCi/L	06/27/18 12:02	07/19/18 13:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/27/18 12:02	07/19/18 13:29	1
Y Carrier	87.5		40 - 110					06/27/18 12:02	07/19/18 13:29	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0382	U	0.270	0.270	5.00	0.432	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13803 MW-1

Lab Sample ID: 400-155116-10

Date Collected: 06/12/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.564		0.263	0.267	1.00	0.259	pCi/L	06/27/18 08:48	07/19/18 21:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/27/18 08:48	07/19/18 21:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.326	U	0.260	0.262	1.00	0.409	pCi/L	06/27/18 12:02	07/19/18 13:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/27/18 12:02	07/19/18 13:29	1
Y Carrier	86.7		40 - 110					06/27/18 12:02	07/19/18 13:29	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.890		0.370	0.374	5.00	0.409	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13804 MW-15

Lab Sample ID: 400-155116-11

Date Collected: 06/12/18 15:56

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.316	U	0.240	0.241	1.00	0.329	pCi/L	06/27/18 08:48	07/19/18 21:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/27/18 08:48	07/19/18 21:26	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.130	U	0.245	0.245	1.00	0.419	pCi/L	06/27/18 12:02	07/19/18 13:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/27/18 12:02	07/19/18 13:29	1
Y Carrier	89.0		40 - 110					06/27/18 12:02	07/19/18 13:29	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.446		0.343	0.344	5.00	0.419	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13805 MW-3

Lab Sample ID: 400-155116-12

Date Collected: 06/12/18 17:45

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.272	U	0.239	0.240	1.00	0.351	pCi/L	06/27/18 08:48	07/19/18 21:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					06/27/18 08:48	07/19/18 21:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0163	U	0.345	0.345	1.00	0.606	pCi/L	06/27/18 12:02	07/19/18 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					06/27/18 12:02	07/19/18 13:21	1
Y Carrier	88.2		40 - 110					06/27/18 12:02	07/19/18 13:21	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.289	U	0.420	0.420	5.00	0.606	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13806 MW-14S

Lab Sample ID: 400-155116-13

Date Collected: 06/12/18 18:56

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0768	U	0.196	0.196	1.00	0.368	pCi/L	06/27/18 08:48	07/19/18 21:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					06/27/18 08:48	07/19/18 21:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.596		0.352	0.357	1.00	0.535	pCi/L	06/27/18 12:02	07/19/18 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					06/27/18 12:02	07/19/18 13:21	1
Y Carrier	84.1		40 - 110					06/27/18 12:02	07/19/18 13:21	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.672		0.403	0.407	5.00	0.535	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13807 MW-2

Lab Sample ID: 400-155116-14

Date Collected: 06/12/18 19:44

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.233	U	0.261	0.262	1.00	0.419	pCi/L	06/27/18 08:48	07/19/18 21:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					06/27/18 08:48	07/19/18 21:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.359	U	0.338	0.340	1.00	0.547	pCi/L	06/27/18 12:02	07/19/18 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					06/27/18 12:02	07/19/18 13:21	1
Y Carrier	90.5		40 - 110					06/27/18 12:02	07/19/18 13:21	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.592		0.427	0.429	5.00	0.547	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13808 MW-6 DUP

Lab Sample ID: 400-155116-15

Date Collected: 06/11/18 12:24

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.351	U	0.276	0.278	1.00	0.390	pCi/L	06/27/18 08:48	07/19/18 21:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					06/27/18 08:48	07/19/18 21:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0311	U	0.350	0.350	1.00	0.622	pCi/L	06/27/18 12:02	07/19/18 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					06/27/18 12:02	07/19/18 13:21	1
Y Carrier	89.3		40 - 110					06/27/18 12:02	07/19/18 13:21	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.319	U	0.446	0.447	5.00	0.622	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13809 FB-1

Lab Sample ID: 400-155116-16

Date Collected: 06/11/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0293	U	0.161	0.161	1.00	0.335	pCi/L	06/27/18 08:48	07/19/18 21:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					06/27/18 08:48	07/19/18 21:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.286	U	0.292	0.293	1.00	0.475	pCi/L	06/27/18 12:02	07/19/18 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					06/27/18 12:02	07/19/18 13:21	1
Y Carrier	90.5		40 - 110					06/27/18 12:02	07/19/18 13:21	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.315	U	0.333	0.334	5.00	0.475	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13810 MW-10 DUP

Lab Sample ID: 400-155116-17

Date Collected: 06/12/18 10:51

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0244	U	0.151	0.151	1.00	0.344	pCi/L	06/27/18 08:48	07/19/18 21:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/27/18 08:48	07/19/18 21:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0667	U	0.284	0.284	1.00	0.500	pCi/L	06/27/18 12:02	07/19/18 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/27/18 12:02	07/19/18 13:21	1
Y Carrier	80.0		40 - 110					06/27/18 12:02	07/19/18 13:21	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0422	U	0.322	0.322	5.00	0.500	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13811 FB-2

Lab Sample ID: 400-155116-18

Date Collected: 06/12/18 12:06

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0710	U	0.176	0.177	1.00	0.335	pCi/L	06/27/18 08:48	07/19/18 21:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					06/27/18 08:48	07/19/18 21:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0211	U	0.240	0.240	1.00	0.434	pCi/L	06/27/18 12:02	07/19/18 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					06/27/18 12:02	07/19/18 13:21	1
Y Carrier	105		40 - 110					06/27/18 12:02	07/19/18 13:21	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0499	U	0.298	0.298	5.00	0.434	pCi/L		07/24/18 10:36	1

Client Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13812 EB-1

Lab Sample ID: 400-155116-19

Date Collected: 06/12/18 20:11

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.252	U	0.228	0.229	1.00	0.340	pCi/L	06/27/18 08:48	07/19/18 21:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/27/18 08:48	07/19/18 21:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0241	U	0.275	0.275	1.00	0.488	pCi/L	06/27/18 12:02	07/19/18 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/27/18 12:02	07/19/18 13:22	1
Y Carrier	88.6		40 - 110					06/27/18 12:02	07/19/18 13:22	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.276	U	0.357	0.358	5.00	0.488	pCi/L		07/24/18 10:36	1

Definitions/Glossary

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

TestAmerica Job ID: 400-155116-2
SDG: Gaston Gypsum 1155

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13794 MW-5

Lab Sample ID: 400-155116-1

Date Collected: 06/11/18 11:31

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:18	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376497	07/19/18 13:23	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13795 MW-6

Lab Sample ID: 400-155116-2

Date Collected: 06/11/18 12:24

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:18	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376497	07/19/18 13:24	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13796 MW-7

Lab Sample ID: 400-155116-3

Date Collected: 06/11/18 14:44

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:18	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376497	07/19/18 13:24	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13797 MW-8

Lab Sample ID: 400-155116-4

Date Collected: 06/12/18 08:51

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376498	07/19/18 13:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155116-2
SDG: Gaston Gypsum 1155

Client Sample ID: AY13798 MW-9

Lab Sample ID: 400-155116-5

Date Collected: 06/12/18 09:53

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376498	07/19/18 13:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13799 MW-10

Lab Sample ID: 400-155116-6

Date Collected: 06/12/18 10:51

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376498	07/19/18 13:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13800 MW-11

Lab Sample ID: 400-155116-7

Date Collected: 06/12/18 12:37

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376498	07/19/18 13:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13801 MW-12

Lab Sample ID: 400-155116-8

Date Collected: 06/12/18 13:33

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376498	07/19/18 13:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13802 MW-13

Lab Sample ID: 400-155116-9

Date Collected: 06/12/18 14:16

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376498	07/19/18 13:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13803 MW-1

Lab Sample ID: 400-155116-10

Date Collected: 06/12/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376497	07/19/18 21:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376498	07/19/18 13:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13804 MW-15

Lab Sample ID: 400-155116-11

Date Collected: 06/12/18 15:56

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:26	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376498	07/19/18 13:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13805 MW-3

Lab Sample ID: 400-155116-12

Date Collected: 06/12/18 17:45

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376495	07/19/18 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155116-2
SDG: Gaston Gypsum 1155

Client Sample ID: AY13806 MW-14S

Lab Sample ID: 400-155116-13

Date Collected: 06/12/18 18:56

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376495	07/19/18 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13807 MW-2

Lab Sample ID: 400-155116-14

Date Collected: 06/12/18 19:44

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376495	07/19/18 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13808 MW-6 DUP

Lab Sample ID: 400-155116-15

Date Collected: 06/11/18 12:24

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376495	07/19/18 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13809 FB-1

Lab Sample ID: 400-155116-16

Date Collected: 06/11/18 15:03

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376495	07/19/18 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Client Sample ID: AY13810 MW-10 DUP

Lab Sample ID: 400-155116-17

Date Collected: 06/12/18 10:51

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376495	07/19/18 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13811 FB-2

Lab Sample ID: 400-155116-18

Date Collected: 06/12/18 12:06

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376495	07/19/18 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Client Sample ID: AY13812 EB-1

Lab Sample ID: 400-155116-19

Date Collected: 06/12/18 20:11

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372801	06/27/18 08:48	JLC	TAL SL
Total/NA	Analysis	9315		1	376495	07/19/18 21:24	RTM	TAL SL
Total/NA	Prep	PrecSep_0			372831	06/27/18 12:02	JLC	TAL SL
Total/NA	Analysis	9320		1	376495	07/19/18 13:22	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377653	07/24/18 10:36	RTM	TAL SL

Laboratory References:

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

QC Association Summary

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Rad

Prep Batch: 372801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-1	AY13794 MW-5	Total/NA	Water	PrecSep-21	
400-155116-2	AY13795 MW-6	Total/NA	Water	PrecSep-21	
400-155116-3	AY13796 MW-7	Total/NA	Water	PrecSep-21	
400-155116-4	AY13797 MW-8	Total/NA	Water	PrecSep-21	
400-155116-5	AY13798 MW-9	Total/NA	Water	PrecSep-21	
400-155116-6	AY13799 MW-10	Total/NA	Water	PrecSep-21	
400-155116-7	AY13800 MW-11	Total/NA	Water	PrecSep-21	
400-155116-8	AY13801 MW-12	Total/NA	Water	PrecSep-21	
400-155116-9	AY13802 MW-13	Total/NA	Water	PrecSep-21	
400-155116-10	AY13803 MW-1	Total/NA	Water	PrecSep-21	
400-155116-11	AY13804 MW-15	Total/NA	Water	PrecSep-21	
400-155116-12	AY13805 MW-3	Total/NA	Water	PrecSep-21	
400-155116-13	AY13806 MW-14S	Total/NA	Water	PrecSep-21	
400-155116-14	AY13807 MW-2	Total/NA	Water	PrecSep-21	
400-155116-15	AY13808 MW-6 DUP	Total/NA	Water	PrecSep-21	
400-155116-16	AY13809 FB-1	Total/NA	Water	PrecSep-21	
400-155116-17	AY13810 MW-10 DUP	Total/NA	Water	PrecSep-21	
400-155116-18	AY13811 FB-2	Total/NA	Water	PrecSep-21	
400-155116-19	AY13812 EB-1	Total/NA	Water	PrecSep-21	
MB 160-372801/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-372801/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-155116-5 DU	AY13798 MW-9	Total/NA	Water	PrecSep-21	

Prep Batch: 372831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155116-1	AY13794 MW-5	Total/NA	Water	PrecSep_0	
400-155116-2	AY13795 MW-6	Total/NA	Water	PrecSep_0	
400-155116-3	AY13796 MW-7	Total/NA	Water	PrecSep_0	
400-155116-4	AY13797 MW-8	Total/NA	Water	PrecSep_0	
400-155116-5	AY13798 MW-9	Total/NA	Water	PrecSep_0	
400-155116-6	AY13799 MW-10	Total/NA	Water	PrecSep_0	
400-155116-7	AY13800 MW-11	Total/NA	Water	PrecSep_0	
400-155116-8	AY13801 MW-12	Total/NA	Water	PrecSep_0	
400-155116-9	AY13802 MW-13	Total/NA	Water	PrecSep_0	
400-155116-10	AY13803 MW-1	Total/NA	Water	PrecSep_0	
400-155116-11	AY13804 MW-15	Total/NA	Water	PrecSep_0	
400-155116-12	AY13805 MW-3	Total/NA	Water	PrecSep_0	
400-155116-13	AY13806 MW-14S	Total/NA	Water	PrecSep_0	
400-155116-14	AY13807 MW-2	Total/NA	Water	PrecSep_0	
400-155116-15	AY13808 MW-6 DUP	Total/NA	Water	PrecSep_0	
400-155116-16	AY13809 FB-1	Total/NA	Water	PrecSep_0	
400-155116-17	AY13810 MW-10 DUP	Total/NA	Water	PrecSep_0	
400-155116-18	AY13811 FB-2	Total/NA	Water	PrecSep_0	
400-155116-19	AY13812 EB-1	Total/NA	Water	PrecSep_0	
MB 160-372831/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-372831/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-155116-5 DU	AY13798 MW-9	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-372801/22-A
Matrix: Water
Analysis Batch: 376495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372801

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08852	U	0.230	0.230	1.00	0.423	pCi/L	06/27/18 08:48	07/19/18 21:24	1
Carrier	%Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/27/18 08:48	07/19/18 21:24	1

Lab Sample ID: LCS 160-372801/1-A
Matrix: Water
Analysis Batch: 376497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372801

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	15.1	13.31		1.65	1.00	0.304	pCi/L	88	68 - 137
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	104		40 - 110						

Lab Sample ID: 400-155116-5 DU
Matrix: Water
Analysis Batch: 376497

Client Sample ID: AY13798 MW-9
Prep Type: Total/NA
Prep Batch: 372801

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.0585	U	0.1696	U	0.198	1.00	0.318	pCi/L	0.30	1
Carrier	%Yield	DU Qualifier	Limits							
Ba Carrier	97.1		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-372831/22-A
Matrix: Water
Analysis Batch: 376495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372831

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2188	U	0.286	0.287	1.00	0.475	pCi/L	06/27/18 12:02	07/19/18 13:22	1
Carrier	%Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/27/18 12:02	07/19/18 13:22	1
Y Carrier	87.5		40 - 110					06/27/18 12:02	07/19/18 13:22	1

QC Sample Results

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

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

Lab Sample ID: LCS 160-372831/1-A
Matrix: Water
Analysis Batch: 376497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372831

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	10.8	10.01		1.20	1.00	0.415	pCi/L	92	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	104		40 - 110
Y Carrier	82.6		40 - 110

Lab Sample ID: 400-155116-5 DU
Matrix: Water
Analysis Batch: 376498

Client Sample ID: AY13798 MW-9
Prep Type: Total/NA
Prep Batch: 372831

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.0829	U	0.1984	U	0.294	1.00	0.492	pCi/L	0.20	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	97.1		40 - 110
Y Carrier	85.6		40 - 110

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Lab Sample ID: 400-155116-5 DU
Matrix: Water
Analysis Batch: 377653

Client Sample ID: AY13798 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	0.141	U	0.3679	U	0.354	5.00	0.492	pCi/L	0.34	

Chain of Custody Record

Client Information Client Contact: Sarah Copeland Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Callera State, Zip: AL 35040 Phone: 205-664-5121 (Tel) Email: sgicopella@southernco.com Project Name: CCR Site: Gaston Gypsum 1155		Sampler: Lab PM: Whitney, Chayenne R Anirmony Goggins Phone: E-Mail: Chayenne.whitmore@testamericainc.com																
Due Date Requested: TAT Requested (days): PO #: MO #: Project #: 40007143 SSOVR:		Carrier Tracking No(s): COC No: 400-56525-24537.1 Page: Page 1 of 2 Job #: 155116																
Analysis Requested 9315_Ra229, 9320_Ra229, Ra229Ra229_GFPc		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NH4SO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Heptane N - None O - MHA/O2 P - Na2SO4 Q - Na2S2O3 R - Na2SO3 S - H2SO4 T - TSP Dodecylsulfate U - Acetone V - NCA W - pH 4.5 Z - other (specify)																
Sample Identification		Special Instructions/Note:																
AY13794	6/1/18	1131	G	Water	Field Filtered Sample (Yes or No)	X	Perform M/S/MSD (Yes or No)	N	SM 4500 F.C	X	SM 4500 Cl ⁻	X	SM 4500 SO4 ²⁻	X	9315_Ra229, 9320_Ra229, Ra229Ra229_GFPc	2	MW-5	
AY13795	6/1/18	1224	G	Water		X			X	X	X	X	X	X		2	MW-6	
AY13796	6/1/18	1444	G	Water		X			X	X	X	X	X	X		2	MW-7	
AY13797	6/12/18	0851	G	Water		X			X	X	X	X	X	X		2	MW-8	
AY13798	6/12/18	0953	G	Water		X		Y	X	X	X	X	X	X		4	MW-9	
AY13799	6/12/18	1051	G	Water		X			X	X	X	X	X	X		2	MW-10	
AY13800	6/12/18	1237	G	Water		X			X	X	X	X	X	X		2	MW-11	
AY13801	6/12/18	1333	G	Water		X			X	X	X	X	X	X		2	MW-12	
AY13802	6/12/18	1416	G	Water		X			X	X	X	X	X	X		2	MW-13	
AY13803	6/12/18	1503	G	Water		X			X	X	X	X	X	X		2	MW-1	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)																		
Empty Kit Relinquished by: Requisitioned by: Sarah Copeland Date: 6/14/2018 0800 Relinquished by: Date/time: Relinquished by: Date/time:																		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: Date/time: 6-15-18 9:03 Received by: <i>S. Whitmore</i> Method of Shipment: <i>5.6°C, 4.2°C, 3.7°C</i> Company: <i>TA-PEN</i> Company: <i>1R-8</i>																		



Chain of Custody Record

Client Information		Lab PM Whitmore, Cheyenne R		Contact Tracking Note								
Client Contact Sarah Copeland		E-Mail: cheyenne.whitmore@testamericainc.com		COC No: 400-56525-24537.1								
Company: Alabama Power General Test Laboratory		Due Date Requested:		Page Page 2 of 2								
Address: 744 County Rd 87 GSC #8		TAT Requested (days):		Job #: 155116								
City: Cedera		Routine		Preservation Codes: M - Hexane N - None O - AgNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylsulfate U - Acetic Acid V - MCAA W - ph 4-5 X - EDTA Y - EDA Z - other (specify)								
State, Zip: AL, 35040		PO #:		Other:								
Phone: 205-564-5121(Tel)		WO #:		Total Number of containers								
Email: SjCopella@southernco.com		Project #: 40007143		Special Instructions/Note:								
Project Name CCR		SOW#:										
Site: Gaston Gypsum 1155												
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Urine, Blood, Urine, Acid)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F.C	SM 4500 CLE	SM 4500 SQA.E	9315 Ra226, 9320 Ra226, Ra226Ra228, 93PC	Analysis Requested	Special Instructions/Note:
AY13804	6/12/18	1556	G	Water	X	N	X	X	X	X		MMW-15
AY13805	6/12/18	1745	G	Water	X	X	X	X	X	X		MMW-3
AY13806	6/12/18	1856	G	Water	X	X	X	X	X	X		MMW-14S
AY13807	6/12/18	1944	G	Water	X	X	X	X	X	X		MMW-2
AY13808	6/11/18	1224	G	Water	X	X	X	X	X	X		MMW-6 Dup (Sample Duplicate)
AY13809	6/11/18	1503	G	Water	X	X	X	X	X	X		FB-1 (Field Blank)
AY13810	6/12/18	1051	G	Water	X	X	X	X	X	X		MMW-10 Dup (Sample Duplicate)
AY13811	6/12/18	1206	G	Water	X	X	X	X	X	X		FB-2 (Field Blank)
AY13812	6/12/18	2011	G	Water	X	X	X	X	X	X		EB-1 (Equipment Blank)
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)												
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months												
Special Instructions/QC Requirements:												
Relinquished by: Sarah Copeland Date/Time: 6/14/2018: 0800 Company: APC												
Relinquished by: Date/Time: Company:												
Relinquished by: Date/Time: Company:												
Custody Seal Intact: <input type="checkbox"/> Custody Seal No. _____ Δ Yes Δ No												
Cooler Temperature(s) °C and Other Remarks: 6-15-18 903 TA-PEN												



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-155116-2
SDG Number: Gaston Gypsum 1155

Login Number: 155116

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.6°C 4.2°C 3.7°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-155116-2
SDG Number: Gaston Gypsum 1155

Login Number: 155116
List Number: 2
Creator: Press, Nicholas B

List Source: TestAmerica St. Louis
List Creation: 06/19/18 04:33 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	18,18,18
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-155116-2
 SDG: Gaston Gypsum 1155

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-18 *
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-14	09-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-19
ANAB	DoD ELAP		L2305	04-06-19
Arizona	State Program	9	AZ0813	12-08-18
California	State Program	9	2886	06-30-19
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-19
Illinois	NELAP	5	200023	11-30-18
Iowa	State Program	7	373	12-01-18
Kansas	NELAP	7	E-10236	10-31-18
Kentucky (DW)	State Program	4	90125	12-31-18
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA180017	12-31-18
Maryland	State Program	3	310	09-30-18 *
Michigan	State Program	5	9005	06-30-18 *
Missouri	State Program	7	780	06-30-18 *

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-155116-2
SDG: Gaston Gypsum 1155

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Nevada	State Program	9	MO000542018-1	07-31-18 *
New Jersey	NELAP	2	MO002	06-30-19
New York	NELAP	2	11616	03-31-19
North Dakota	State Program	8	R207	06-30-18 *
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-18 *
Pennsylvania	NELAP	3	68-00540	02-28-19
South Carolina	State Program	4	85002001	06-30-18 *
Texas	NELAP	6	T104704193-17-11	07-31-18 *
US Fish & Wildlife	Federal		058448	07-31-18
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-18 *
Virginia	NELAP	3	460230	06-14-19
Washington	State Program	10	C592	08-30-18
West Virginia DEP	State Program	3	381	08-31-18 *

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

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-1	6/12/2018 14:40	371.6	uS/cm	Conductivity
GN-GSA-MW-1	6/12/2018 14:40	30.42	ft	Depth to Water Detail
GN-GSA-MW-1	6/12/2018 14:40	0.15	mg/L	DO
GN-GSA-MW-1	6/12/2018 14:40	-165.8	mv	Oxidation Reduction Potention
GN-GSA-MW-1	6/12/2018 14:40	7.61	pH	pH
GN-GSA-MW-1	6/12/2018 14:40	21.33	C	Temperature
GN-GSA-MW-1	6/12/2018 14:40	1.76	NTU	Turbidity
GN-GSA-MW-1	6/12/2018 14:45	365.9	uS/cm	Conductivity
GN-GSA-MW-1	6/12/2018 14:45	30.65	ft	Depth to Water Detail
GN-GSA-MW-1	6/12/2018 14:45	0.12	mg/L	DO
GN-GSA-MW-1	6/12/2018 14:45	-161.9	mv	Oxidation Reduction Potention
GN-GSA-MW-1	6/12/2018 14:45	7.65	pH	pH
GN-GSA-MW-1	6/12/2018 14:45	21.1	C	Temperature
GN-GSA-MW-1	6/12/2018 14:45	1.76	NTU	Turbidity
GN-GSA-MW-1	6/12/2018 14:50	367.9	uS/cm	Conductivity
GN-GSA-MW-1	6/12/2018 14:50	30.88	ft	Depth to Water Detail
GN-GSA-MW-1	6/12/2018 14:50	0.1	mg/L	DO
GN-GSA-MW-1	6/12/2018 14:50	-155.3	mv	Oxidation Reduction Potention
GN-GSA-MW-1	6/12/2018 14:50	7.65	pH	pH
GN-GSA-MW-1	6/12/2018 14:50	21.04	C	Temperature
GN-GSA-MW-1	6/12/2018 14:50	1.74	NTU	Turbidity
GN-GSA-MW-1	6/12/2018 14:56	374.9	uS/cm	Conductivity
GN-GSA-MW-1	6/12/2018 14:56	31.01	ft	Depth to Water Detail
GN-GSA-MW-1	6/12/2018 14:56	0.09	mg/L	DO
GN-GSA-MW-1	6/12/2018 14:56	-146.6	mv	Oxidation Reduction Potention
GN-GSA-MW-1	6/12/2018 14:56	7.64	pH	pH
GN-GSA-MW-1	6/12/2018 14:56	21.08	C	Temperature
GN-GSA-MW-1	6/12/2018 14:56	1.88	NTU	Turbidity
GN-GSA-MW-1	6/12/2018 15:01	381.3	uS/cm	Conductivity
GN-GSA-MW-1	6/12/2018 15:01	31.12	ft	Depth to Water Detail
GN-GSA-MW-1	6/12/2018 15:01	0.09	mg/L	DO
GN-GSA-MW-1	6/12/2018 15:01	-138.1	mv	Oxidation Reduction Potention
GN-GSA-MW-1	6/12/2018 15:01	7.62	pH	pH
GN-GSA-MW-1	6/12/2018 15:01	21.03	C	Temperature
GN-GSA-MW-1	6/12/2018 15:01	1.86	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-2	6/12/2018 19:21	540.2	uS/cm	Conductivity
GN-GSA-MW-2	6/12/2018 19:21	20.88	ft	Depth to Water Detail
GN-GSA-MW-2	6/12/2018 19:21	1.85	mg/L	DO
GN-GSA-MW-2	6/12/2018 19:21	-98.1	mv	Oxidation Reduction Potention
GN-GSA-MW-2	6/12/2018 19:21	7.21	pH	pH
GN-GSA-MW-2	6/12/2018 19:21	22.52	C	Temperature
GN-GSA-MW-2	6/12/2018 19:21	1.68	NTU	Turbidity
GN-GSA-MW-2	6/12/2018 19:26	533.1	uS/cm	Conductivity
GN-GSA-MW-2	6/12/2018 19:26	21.2	ft	Depth to Water Detail
GN-GSA-MW-2	6/12/2018 19:26	1.97	mg/L	DO
GN-GSA-MW-2	6/12/2018 19:26	-45.7	mv	Oxidation Reduction Potention
GN-GSA-MW-2	6/12/2018 19:26	7.13	pH	pH
GN-GSA-MW-2	6/12/2018 19:26	22.04	C	Temperature
GN-GSA-MW-2	6/12/2018 19:26	1.9	NTU	Turbidity
GN-GSA-MW-2	6/12/2018 19:31	512.7	uS/cm	Conductivity
GN-GSA-MW-2	6/12/2018 19:31	21.36	ft	Depth to Water Detail
GN-GSA-MW-2	6/12/2018 19:31	2.29	mg/L	DO
GN-GSA-MW-2	6/12/2018 19:31	-18.4	mv	Oxidation Reduction Potention
GN-GSA-MW-2	6/12/2018 19:31	7.15	pH	pH
GN-GSA-MW-2	6/12/2018 19:31	22.08	C	Temperature
GN-GSA-MW-2	6/12/2018 19:31	1.86	NTU	Turbidity
GN-GSA-MW-2	6/12/2018 19:36	495.2	uS/cm	Conductivity
GN-GSA-MW-2	6/12/2018 19:36	21.47	ft	Depth to Water Detail
GN-GSA-MW-2	6/12/2018 19:36	2.43	mg/L	DO
GN-GSA-MW-2	6/12/2018 19:36	-8	mv	Oxidation Reduction Potention
GN-GSA-MW-2	6/12/2018 19:36	7.18	pH	pH
GN-GSA-MW-2	6/12/2018 19:36	21.82	C	Temperature
GN-GSA-MW-2	6/12/2018 19:36	1.75	NTU	Turbidity
GN-GSA-MW-2	6/12/2018 19:42	494.8	uS/cm	Conductivity
GN-GSA-MW-2	6/12/2018 19:42	21.58	ft	Depth to Water Detail
GN-GSA-MW-2	6/12/2018 19:42	2.42	mg/L	DO
GN-GSA-MW-2	6/12/2018 19:42	-2.8	mv	Oxidation Reduction Potention
GN-GSA-MW-2	6/12/2018 19:42	7.19	pH	pH
GN-GSA-MW-2	6/12/2018 19:42	21.86	C	Temperature
GN-GSA-MW-2	6/12/2018 19:42	1.72	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-3	6/12/2018 16:42	429.1	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 16:42	21.6	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 16:42	1.02	mg/L	DO
GN-GSA-MW-3	6/12/2018 16:42	31.4	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 16:42	6.75	pH	pH
GN-GSA-MW-3	6/12/2018 16:42	23.72	C	Temperature
GN-GSA-MW-3	6/12/2018 16:42	1.95	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 16:47	425.9	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 16:47	22	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 16:47	0.89	mg/L	DO
GN-GSA-MW-3	6/12/2018 16:47	31.6	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 16:47	6.73	pH	pH
GN-GSA-MW-3	6/12/2018 16:47	23.54	C	Temperature
GN-GSA-MW-3	6/12/2018 16:47	2.09	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 16:52	420.4	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 16:52	22.31	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 16:52	0.82	mg/L	DO
GN-GSA-MW-3	6/12/2018 16:52	31.7	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 16:52	6.73	pH	pH
GN-GSA-MW-3	6/12/2018 16:52	23.25	C	Temperature
GN-GSA-MW-3	6/12/2018 16:52	1.84	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 16:57	416.9	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 16:57	22.55	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 16:57	0.79	mg/L	DO
GN-GSA-MW-3	6/12/2018 16:57	31.9	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 16:57	6.72	pH	pH
GN-GSA-MW-3	6/12/2018 16:57	23.03	C	Temperature
GN-GSA-MW-3	6/12/2018 16:57	1.88	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:02	411.5	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:02	22.8	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 17:02	0.84	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:02	32.3	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 17:02	6.72	pH	pH
GN-GSA-MW-3	6/12/2018 17:02	22.9	C	Temperature
GN-GSA-MW-3	6/12/2018 17:02	1.68	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:07	408.8	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:07	23.05	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 17:07	0.92	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:07	32.8	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 17:07	6.71	pH	pH
GN-GSA-MW-3	6/12/2018 17:07	22.81	C	Temperature
GN-GSA-MW-3	6/12/2018 17:07	2.34	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:12	408.9	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:12	23.28	ft	Depth to Water Detail

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-3	6/12/2018 17:12	0.98	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:12	33	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 17:12	6.72	pH	pH
GN-GSA-MW-3	6/12/2018 17:12	22.89	C	Temperature
GN-GSA-MW-3	6/12/2018 17:12	2.29	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:17	409.9	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:17	23.46	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 17:17	1.05	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:17	33.2	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 17:17	6.72	pH	pH
GN-GSA-MW-3	6/12/2018 17:17	22.77	C	Temperature
GN-GSA-MW-3	6/12/2018 17:17	2.6	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:22	411.1	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:22	23.65	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 17:22	1.09	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:22	33.4	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 17:22	6.73	pH	pH
GN-GSA-MW-3	6/12/2018 17:22	22.87	C	Temperature
GN-GSA-MW-3	6/12/2018 17:22	2.66	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:27	413.9	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:27	23.8	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 17:27	1.14	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:27	33.4	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 17:27	6.74	pH	pH
GN-GSA-MW-3	6/12/2018 17:27	22.75	C	Temperature
GN-GSA-MW-3	6/12/2018 17:27	2.46	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:32	416	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:32	23.94	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 17:32	1.14	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:32	33.3	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 17:32	6.74	pH	pH
GN-GSA-MW-3	6/12/2018 17:32	22.75	C	Temperature
GN-GSA-MW-3	6/12/2018 17:32	2.32	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:38	417.8	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:38	24.09	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 17:38	1.14	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:38	33.3	mv	Oxidation Reduction Potention
GN-GSA-MW-3	6/12/2018 17:38	6.75	pH	pH
GN-GSA-MW-3	6/12/2018 17:38	22.64	C	Temperature
GN-GSA-MW-3	6/12/2018 17:38	2.37	NTU	Turbidity
GN-GSA-MW-3	6/12/2018 17:43	418.7	uS/cm	Conductivity
GN-GSA-MW-3	6/12/2018 17:43	24.22	ft	Depth to Water Detail
GN-GSA-MW-3	6/12/2018 17:43	1.14	mg/L	DO
GN-GSA-MW-3	6/12/2018 17:43	33.3	mv	Oxidation Reduction Potention

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-3	6/12/2018 17:43	6.76	pH	pH
GN-GSA-MW-3	6/12/2018 17:43	22.58	C	Temperature
GN-GSA-MW-3	6/12/2018 17:43	2.69	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-5	6/11/2018 10:53	693.8	uS/cm	Conductivity
GN-GSA-MW-5	6/11/2018 10:53	29.76	ft	Depth to Water Detail
GN-GSA-MW-5	6/11/2018 10:53	0.31	mg/L	DO
GN-GSA-MW-5	6/11/2018 10:53	-60.7	mv	Oxidation Reduction Potention
GN-GSA-MW-5	6/11/2018 10:53	6.49	pH	pH
GN-GSA-MW-5	6/11/2018 10:53	20.3	C	Temperature
GN-GSA-MW-5	6/11/2018 10:53	10.29	NTU	Turbidity
GN-GSA-MW-5	6/11/2018 10:58	610	uS/cm	Conductivity
GN-GSA-MW-5	6/11/2018 10:58	29.76	ft	Depth to Water Detail
GN-GSA-MW-5	6/11/2018 10:58	0.34	mg/L	DO
GN-GSA-MW-5	6/11/2018 10:58	-47.6	mv	Oxidation Reduction Potention
GN-GSA-MW-5	6/11/2018 10:58	6.47	pH	pH
GN-GSA-MW-5	6/11/2018 10:58	20.48	C	Temperature
GN-GSA-MW-5	6/11/2018 10:58	8.12	NTU	Turbidity
GN-GSA-MW-5	6/11/2018 11:03	572.3	uS/cm	Conductivity
GN-GSA-MW-5	6/11/2018 11:03	29.76	ft	Depth to Water Detail
GN-GSA-MW-5	6/11/2018 11:03	0.35	mg/L	DO
GN-GSA-MW-5	6/11/2018 11:03	-40.3	mv	Oxidation Reduction Potention
GN-GSA-MW-5	6/11/2018 11:03	6.46	pH	pH
GN-GSA-MW-5	6/11/2018 11:03	20.48	C	Temperature
GN-GSA-MW-5	6/11/2018 11:03	5.29	NTU	Turbidity
GN-GSA-MW-5	6/11/2018 11:08	546.7	uS/cm	Conductivity
GN-GSA-MW-5	6/11/2018 11:08	29.76	ft	Depth to Water Detail
GN-GSA-MW-5	6/11/2018 11:08	0.36	mg/L	DO
GN-GSA-MW-5	6/11/2018 11:08	-34.5	mv	Oxidation Reduction Potention
GN-GSA-MW-5	6/11/2018 11:08	6.45	pH	pH
GN-GSA-MW-5	6/11/2018 11:08	20.51	C	Temperature
GN-GSA-MW-5	6/11/2018 11:08	5.07	NTU	Turbidity
GN-GSA-MW-5	6/11/2018 11:13	530.6	uS/cm	Conductivity
GN-GSA-MW-5	6/11/2018 11:13	29.76	ft	Depth to Water Detail
GN-GSA-MW-5	6/11/2018 11:13	0.36	mg/L	DO
GN-GSA-MW-5	6/11/2018 11:13	-29.8	mv	Oxidation Reduction Potention
GN-GSA-MW-5	6/11/2018 11:13	6.44	pH	pH
GN-GSA-MW-5	6/11/2018 11:13	20.55	C	Temperature
GN-GSA-MW-5	6/11/2018 11:13	3.52	NTU	Turbidity
GN-GSA-MW-5	6/11/2018 11:18	517.7	uS/cm	Conductivity
GN-GSA-MW-5	6/11/2018 11:18	29.76	ft	Depth to Water Detail
GN-GSA-MW-5	6/11/2018 11:18	0.36	mg/L	DO
GN-GSA-MW-5	6/11/2018 11:18	-26.2	mv	Oxidation Reduction Potention
GN-GSA-MW-5	6/11/2018 11:18	6.43	pH	pH
GN-GSA-MW-5	6/11/2018 11:18	20.56	C	Temperature
GN-GSA-MW-5	6/11/2018 11:18	4.35	NTU	Turbidity
GN-GSA-MW-5	6/11/2018 11:23	511.6	uS/cm	Conductivity
GN-GSA-MW-5	6/11/2018 11:23	29.76	ft	Depth to Water Detail

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-5	6/11/2018 11:23	0.36	mg/L	DO
GN-GSA-MW-5	6/11/2018 11:23	-22.6	mv	Oxidation Reduction Potention
GN-GSA-MW-5	6/11/2018 11:23	6.43	pH	pH
GN-GSA-MW-5	6/11/2018 11:23	20.3	C	Temperature
GN-GSA-MW-5	6/11/2018 11:23	3.07	NTU	Turbidity
GN-GSA-MW-5	6/11/2018 11:29	501.4	uS/cm	Conductivity
GN-GSA-MW-5	6/11/2018 11:29	29.76	ft	Depth to Water Detail
GN-GSA-MW-5	6/11/2018 11:29	0.36	mg/L	DO
GN-GSA-MW-5	6/11/2018 11:29	-20.8	mv	Oxidation Reduction Potention
GN-GSA-MW-5	6/11/2018 11:29	6.43	pH	pH
GN-GSA-MW-5	6/11/2018 11:29	20.17	C	Temperature
GN-GSA-MW-5	6/11/2018 11:29	4.33	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-6	6/11/2018 12:02	26.6	uS/cm	Conductivity
GN-GSA-MW-6	6/11/2018 12:02	29.21	ft	Depth to Water Detail
GN-GSA-MW-6	6/11/2018 12:02	1.14	mg/L	DO
GN-GSA-MW-6	6/11/2018 12:02	189.6	mv	Oxidation Reduction Potention
GN-GSA-MW-6	6/11/2018 12:02	4.62	pH	pH
GN-GSA-MW-6	6/11/2018 12:02	21.28	C	Temperature
GN-GSA-MW-6	6/11/2018 12:02	5.63	NTU	Turbidity
GN-GSA-MW-6	6/11/2018 12:07	27.1	uS/cm	Conductivity
GN-GSA-MW-6	6/11/2018 12:07	29.21	ft	Depth to Water Detail
GN-GSA-MW-6	6/11/2018 12:07	0.65	mg/L	DO
GN-GSA-MW-6	6/11/2018 12:07	168.9	mv	Oxidation Reduction Potention
GN-GSA-MW-6	6/11/2018 12:07	4.67	pH	pH
GN-GSA-MW-6	6/11/2018 12:07	21.32	C	Temperature
GN-GSA-MW-6	6/11/2018 12:07	2.9	NTU	Turbidity
GN-GSA-MW-6	6/11/2018 12:12	27.1	uS/cm	Conductivity
GN-GSA-MW-6	6/11/2018 12:12	29.21	ft	Depth to Water Detail
GN-GSA-MW-6	6/11/2018 12:12	0.53	mg/L	DO
GN-GSA-MW-6	6/11/2018 12:12	160.6	mv	Oxidation Reduction Potention
GN-GSA-MW-6	6/11/2018 12:12	4.67	pH	pH
GN-GSA-MW-6	6/11/2018 12:12	21.2	C	Temperature
GN-GSA-MW-6	6/11/2018 12:12	2.42	NTU	Turbidity
GN-GSA-MW-6	6/11/2018 12:17	27.4	uS/cm	Conductivity
GN-GSA-MW-6	6/11/2018 12:17	29.21	ft	Depth to Water Detail
GN-GSA-MW-6	6/11/2018 12:17	0.47	mg/L	DO
GN-GSA-MW-6	6/11/2018 12:17	155.2	mv	Oxidation Reduction Potention
GN-GSA-MW-6	6/11/2018 12:17	4.68	pH	pH
GN-GSA-MW-6	6/11/2018 12:17	21.19	C	Temperature
GN-GSA-MW-6	6/11/2018 12:17	2.31	NTU	Turbidity
GN-GSA-MW-6	6/11/2018 12:22	27.4	uS/cm	Conductivity
GN-GSA-MW-6	6/11/2018 12:22	29.21	ft	Depth to Water Detail
GN-GSA-MW-6	6/11/2018 12:22	0.43	mg/L	DO
GN-GSA-MW-6	6/11/2018 12:22	151.4	mv	Oxidation Reduction Potention
GN-GSA-MW-6	6/11/2018 12:22	4.68	pH	pH
GN-GSA-MW-6	6/11/2018 12:22	21.25	C	Temperature
GN-GSA-MW-6	6/11/2018 12:22	2.19	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-7	6/11/2018 13:41	386.6	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 13:41	28.25	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 13:41	3.61	mg/L	DO
GN-GSA-MW-7	6/11/2018 13:41	-11	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 13:41	6.86	pH	pH
GN-GSA-MW-7	6/11/2018 13:41	24	C	Temperature
GN-GSA-MW-7	6/11/2018 13:41	2.8	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 13:46	383.3	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 13:46	28.6	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 13:46	3.6	mg/L	DO
GN-GSA-MW-7	6/11/2018 13:46	3.1	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 13:46	6.88	pH	pH
GN-GSA-MW-7	6/11/2018 13:46	24.06	C	Temperature
GN-GSA-MW-7	6/11/2018 13:46	2.82	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 13:51	383.4	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 13:51	28.83	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 13:51	3.06	mg/L	DO
GN-GSA-MW-7	6/11/2018 13:51	6.3	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 13:51	6.85	pH	pH
GN-GSA-MW-7	6/11/2018 13:51	24.06	C	Temperature
GN-GSA-MW-7	6/11/2018 13:51	2.72	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 13:56	380.7	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 13:56	28.93	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 13:56	2.9	mg/L	DO
GN-GSA-MW-7	6/11/2018 13:56	16	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 13:56	6.83	pH	pH
GN-GSA-MW-7	6/11/2018 13:56	24.2	C	Temperature
GN-GSA-MW-7	6/11/2018 13:56	2.52	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:01	377.9	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:01	29.05	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 14:01	2.64	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:01	27.5	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 14:01	6.81	pH	pH
GN-GSA-MW-7	6/11/2018 14:01	24.61	C	Temperature
GN-GSA-MW-7	6/11/2018 14:01	2.84	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:06	377.8	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:06	29.15	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 14:06	2.54	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:06	45.5	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 14:06	6.8	pH	pH
GN-GSA-MW-7	6/11/2018 14:06	24.85	C	Temperature
GN-GSA-MW-7	6/11/2018 14:06	2.61	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:11	375.1	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:11	29.19	ft	Depth to Water Detail

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-7	6/11/2018 14:11	2.31	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:11	46.7	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 14:11	6.78	pH	pH
GN-GSA-MW-7	6/11/2018 14:11	25.24	C	Temperature
GN-GSA-MW-7	6/11/2018 14:11	2.72	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:16	371.1	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:16	29.21	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 14:16	2.11	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:16	50.4	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 14:16	6.76	pH	pH
GN-GSA-MW-7	6/11/2018 14:16	25.23	C	Temperature
GN-GSA-MW-7	6/11/2018 14:16	2.52	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:21	372.7	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:21	29.25	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 14:21	1.99	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:21	67.2	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 14:21	6.75	pH	pH
GN-GSA-MW-7	6/11/2018 14:21	25.23	C	Temperature
GN-GSA-MW-7	6/11/2018 14:21	2.56	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:26	367.6	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:26	29.34	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 14:26	1.83	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:26	85.3	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 14:26	6.73	pH	pH
GN-GSA-MW-7	6/11/2018 14:26	24.51	C	Temperature
GN-GSA-MW-7	6/11/2018 14:26	2.65	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:31	368.1	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:31	29.43	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 14:31	1.76	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:31	93.1	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 14:31	6.72	pH	pH
GN-GSA-MW-7	6/11/2018 14:31	24.42	C	Temperature
GN-GSA-MW-7	6/11/2018 14:31	2.6	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:36	366.2	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:36	29.45	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 14:36	1.64	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:36	87.3	mv	Oxidation Reduction Potention
GN-GSA-MW-7	6/11/2018 14:36	6.7	pH	pH
GN-GSA-MW-7	6/11/2018 14:36	24.88	C	Temperature
GN-GSA-MW-7	6/11/2018 14:36	2.49	NTU	Turbidity
GN-GSA-MW-7	6/11/2018 14:42	365.7	uS/cm	Conductivity
GN-GSA-MW-7	6/11/2018 14:42	29.46	ft	Depth to Water Detail
GN-GSA-MW-7	6/11/2018 14:42	1.63	mg/L	DO
GN-GSA-MW-7	6/11/2018 14:42	83.9	mv	Oxidation Reduction Potention

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-7	6/11/2018 14:42	6.7	pH	pH
GN-GSA-MW-7	6/11/2018 14:42	25.07	C	Temperature
GN-GSA-MW-7	6/11/2018 14:42	2.47	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-8	6/12/2018 8:33	332.3	uS/cm	Conductivity
GN-GSA-MW-8	6/12/2018 8:33	22	ft	Depth to Water Detail
GN-GSA-MW-8	6/12/2018 8:33	0.81	mg/L	DO
GN-GSA-MW-8	6/12/2018 8:33	-80.3	mv	Oxidation Reduction Potention
GN-GSA-MW-8	6/12/2018 8:33	7.23	pH	pH
GN-GSA-MW-8	6/12/2018 8:33	20.88	C	Temperature
GN-GSA-MW-8	6/12/2018 8:33	8.9	NTU	Turbidity
GN-GSA-MW-8	6/12/2018 8:38	331.6	uS/cm	Conductivity
GN-GSA-MW-8	6/12/2018 8:38	22.09	ft	Depth to Water Detail
GN-GSA-MW-8	6/12/2018 8:38	0.75	mg/L	DO
GN-GSA-MW-8	6/12/2018 8:38	-92	mv	Oxidation Reduction Potention
GN-GSA-MW-8	6/12/2018 8:38	7.32	pH	pH
GN-GSA-MW-8	6/12/2018 8:38	21.02	C	Temperature
GN-GSA-MW-8	6/12/2018 8:38	5.1	NTU	Turbidity
GN-GSA-MW-8	6/12/2018 8:43	329.9	uS/cm	Conductivity
GN-GSA-MW-8	6/12/2018 8:43	22.16	ft	Depth to Water Detail
GN-GSA-MW-8	6/12/2018 8:43	0.73	mg/L	DO
GN-GSA-MW-8	6/12/2018 8:43	-96.9	mv	Oxidation Reduction Potention
GN-GSA-MW-8	6/12/2018 8:43	7.37	pH	pH
GN-GSA-MW-8	6/12/2018 8:43	21.24	C	Temperature
GN-GSA-MW-8	6/12/2018 8:43	4.37	NTU	Turbidity
GN-GSA-MW-8	6/12/2018 8:49	331	uS/cm	Conductivity
GN-GSA-MW-8	6/12/2018 8:49	22.18	ft	Depth to Water Detail
GN-GSA-MW-8	6/12/2018 8:49	0.74	mg/L	DO
GN-GSA-MW-8	6/12/2018 8:49	-99.4	mv	Oxidation Reduction Potention
GN-GSA-MW-8	6/12/2018 8:49	7.4	pH	pH
GN-GSA-MW-8	6/12/2018 8:49	21.15	C	Temperature
GN-GSA-MW-8	6/12/2018 8:49	4.11	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-9	6/12/2018 9:30	224.1	uS/cm	Conductivity
GN-GSA-MW-9	6/12/2018 9:30	22.75	ft	Depth to Water Detail
GN-GSA-MW-9	6/12/2018 9:30	0.21	mg/L	DO
GN-GSA-MW-9	6/12/2018 9:30	4.3	mv	Oxidation Reduction Potention
GN-GSA-MW-9	6/12/2018 9:30	6.44	pH	pH
GN-GSA-MW-9	6/12/2018 9:30	21.11	C	Temperature
GN-GSA-MW-9	6/12/2018 9:30	6.01	NTU	Turbidity
GN-GSA-MW-9	6/12/2018 9:35	254	uS/cm	Conductivity
GN-GSA-MW-9	6/12/2018 9:35	22.55	ft	Depth to Water Detail
GN-GSA-MW-9	6/12/2018 9:35	0.2	mg/L	DO
GN-GSA-MW-9	6/12/2018 9:35	-4.2	mv	Oxidation Reduction Potention
GN-GSA-MW-9	6/12/2018 9:35	6.58	pH	pH
GN-GSA-MW-9	6/12/2018 9:35	21.1	C	Temperature
GN-GSA-MW-9	6/12/2018 9:35	10.14	NTU	Turbidity
GN-GSA-MW-9	6/12/2018 9:40	272.1	uS/cm	Conductivity
GN-GSA-MW-9	6/12/2018 9:40	22.53	ft	Depth to Water Detail
GN-GSA-MW-9	6/12/2018 9:40	0.19	mg/L	DO
GN-GSA-MW-9	6/12/2018 9:40	-8.6	mv	Oxidation Reduction Potention
GN-GSA-MW-9	6/12/2018 9:40	6.68	pH	pH
GN-GSA-MW-9	6/12/2018 9:40	21.21	C	Temperature
GN-GSA-MW-9	6/12/2018 9:40	8.49	NTU	Turbidity
GN-GSA-MW-9	6/12/2018 9:45	278.3	uS/cm	Conductivity
GN-GSA-MW-9	6/12/2018 9:45	22.46	ft	Depth to Water Detail
GN-GSA-MW-9	6/12/2018 9:45	0.19	mg/L	DO
GN-GSA-MW-9	6/12/2018 9:45	-9.5	mv	Oxidation Reduction Potention
GN-GSA-MW-9	6/12/2018 9:45	6.74	pH	pH
GN-GSA-MW-9	6/12/2018 9:45	21.11	C	Temperature
GN-GSA-MW-9	6/12/2018 9:45	5.95	NTU	Turbidity
GN-GSA-MW-9	6/12/2018 9:50	281	uS/cm	Conductivity
GN-GSA-MW-9	6/12/2018 9:50	22.46	ft	Depth to Water Detail
GN-GSA-MW-9	6/12/2018 9:50	0.19	mg/L	DO
GN-GSA-MW-9	6/12/2018 9:50	-9.6	mv	Oxidation Reduction Potention
GN-GSA-MW-9	6/12/2018 9:50	6.77	pH	pH
GN-GSA-MW-9	6/12/2018 9:50	21.15	C	Temperature
GN-GSA-MW-9	6/12/2018 9:50	4.07	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-10	6/12/2018 10:34	442.4	uS/cm	Conductivity
GN-GSA-MW-10	6/12/2018 10:34	22.2	ft	Depth to Water Detail
GN-GSA-MW-10	6/12/2018 10:34	0.63	mg/L	DO
GN-GSA-MW-10	6/12/2018 10:34	23.8	mv	Oxidation Reduction Potention
GN-GSA-MW-10	6/12/2018 10:34	7.08	pH	pH
GN-GSA-MW-10	6/12/2018 10:34	21.6	C	Temperature
GN-GSA-MW-10	6/12/2018 10:34	2.2	NTU	Turbidity
GN-GSA-MW-10	6/12/2018 10:39	442.5	uS/cm	Conductivity
GN-GSA-MW-10	6/12/2018 10:39	22.2	ft	Depth to Water Detail
GN-GSA-MW-10	6/12/2018 10:39	0.42	mg/L	DO
GN-GSA-MW-10	6/12/2018 10:39	22.7	mv	Oxidation Reduction Potention
GN-GSA-MW-10	6/12/2018 10:39	7.07	pH	pH
GN-GSA-MW-10	6/12/2018 10:39	21.69	C	Temperature
GN-GSA-MW-10	6/12/2018 10:39	1.94	NTU	Turbidity
GN-GSA-MW-10	6/12/2018 10:44	443.1	uS/cm	Conductivity
GN-GSA-MW-10	6/12/2018 10:44	22.2	ft	Depth to Water Detail
GN-GSA-MW-10	6/12/2018 10:44	0.38	mg/L	DO
GN-GSA-MW-10	6/12/2018 10:44	22.5	mv	Oxidation Reduction Potention
GN-GSA-MW-10	6/12/2018 10:44	7.07	pH	pH
GN-GSA-MW-10	6/12/2018 10:44	21.6	C	Temperature
GN-GSA-MW-10	6/12/2018 10:44	1.91	NTU	Turbidity
GN-GSA-MW-10	6/12/2018 10:49	442.5	uS/cm	Conductivity
GN-GSA-MW-10	6/12/2018 10:49	22.2	ft	Depth to Water Detail
GN-GSA-MW-10	6/12/2018 10:49	0.32	mg/L	DO
GN-GSA-MW-10	6/12/2018 10:49	22.7	mv	Oxidation Reduction Potention
GN-GSA-MW-10	6/12/2018 10:49	7.07	pH	pH
GN-GSA-MW-10	6/12/2018 10:49	21.69	C	Temperature
GN-GSA-MW-10	6/12/2018 10:49	1.76	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-11	6/12/2018 11:54	158.1	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 11:54	21.85	ft	Depth to Water Detail
GN-GSA-MW-11	6/12/2018 11:54	1.51	mg/L	DO
GN-GSA-MW-11	6/12/2018 11:54	136.3	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 11:54	6.65	pH	pH
GN-GSA-MW-11	6/12/2018 11:54	21.35	C	Temperature
GN-GSA-MW-11	6/12/2018 11:54	1.75	NTU	Turbidity
GN-GSA-MW-11	6/12/2018 11:59	150.8	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 11:59	21.85	ft	Depth to Water Detail
GN-GSA-MW-11	6/12/2018 11:59	0.96	mg/L	DO
GN-GSA-MW-11	6/12/2018 11:59	82.8	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 11:59	6.43	pH	pH
GN-GSA-MW-11	6/12/2018 11:59	21.19	C	Temperature
GN-GSA-MW-11	6/12/2018 11:59	1.78	NTU	Turbidity
GN-GSA-MW-11	6/12/2018 12:04	153.2	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 12:04	21.85	ft	Depth to Water Detail
GN-GSA-MW-11	6/12/2018 12:04	0.87	mg/L	DO
GN-GSA-MW-11	6/12/2018 12:04	64	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 12:04	6.37	pH	pH
GN-GSA-MW-11	6/12/2018 12:04	21.29	C	Temperature
GN-GSA-MW-11	6/12/2018 12:04	1.73	NTU	Turbidity
GN-GSA-MW-11	6/12/2018 12:09	143.1	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 12:09	21.85	ft	Depth to Water Detail
GN-GSA-MW-11	6/12/2018 12:09	0.68	mg/L	DO
GN-GSA-MW-11	6/12/2018 12:09	57.8	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 12:09	6.31	pH	pH
GN-GSA-MW-11	6/12/2018 12:09	21.28	C	Temperature
GN-GSA-MW-11	6/12/2018 12:09	1.78	NTU	Turbidity
GN-GSA-MW-11	6/12/2018 12:14	136.1	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 12:14	21.85	ft	Depth to Water Detail
GN-GSA-MW-11	6/12/2018 12:14	0.65	mg/L	DO
GN-GSA-MW-11	6/12/2018 12:14	59.2	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 12:14	6.25	pH	pH
GN-GSA-MW-11	6/12/2018 12:14	21.33	C	Temperature
GN-GSA-MW-11	6/12/2018 12:14	1.68	NTU	Turbidity
GN-GSA-MW-11	6/12/2018 12:19	130.4	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 12:19	21.85	ft	Depth to Water Detail
GN-GSA-MW-11	6/12/2018 12:19	0.58	mg/L	DO
GN-GSA-MW-11	6/12/2018 12:19	58.2	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 12:19	6.21	pH	pH
GN-GSA-MW-11	6/12/2018 12:19	21.42	C	Temperature
GN-GSA-MW-11	6/12/2018 12:19	1.73	NTU	Turbidity
GN-GSA-MW-11	6/12/2018 12:24	126.4	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 12:24	21.85	ft	Depth to Water Detail

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-11	6/12/2018 12:24	0.51	mg/L	DO
GN-GSA-MW-11	6/12/2018 12:24	59.2	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 12:24	6.17	pH	pH
GN-GSA-MW-11	6/12/2018 12:24	21.23	C	Temperature
GN-GSA-MW-11	6/12/2018 12:24	2.08	NTU	Turbidity
GN-GSA-MW-11	6/12/2018 12:29	122.1	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 12:29	21.85	ft	Depth to Water Detail
GN-GSA-MW-11	6/12/2018 12:29	0.43	mg/L	DO
GN-GSA-MW-11	6/12/2018 12:29	62.8	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 12:29	6.14	pH	pH
GN-GSA-MW-11	6/12/2018 12:29	21.02	C	Temperature
GN-GSA-MW-11	6/12/2018 12:29	1.72	NTU	Turbidity
GN-GSA-MW-11	6/12/2018 12:35	120.7	uS/cm	Conductivity
GN-GSA-MW-11	6/12/2018 12:35	21.85	ft	Depth to Water Detail
GN-GSA-MW-11	6/12/2018 12:35	0.41	mg/L	DO
GN-GSA-MW-11	6/12/2018 12:35	64.3	mv	Oxidation Reduction Potention
GN-GSA-MW-11	6/12/2018 12:35	6.13	pH	pH
GN-GSA-MW-11	6/12/2018 12:35	21.11	C	Temperature
GN-GSA-MW-11	6/12/2018 12:35	1.61	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-12	6/12/2018 13:17	413.8	uS/cm	Conductivity
GN-GSA-MW-12	6/12/2018 13:17	20.3	ft	Depth to Water Detail
GN-GSA-MW-12	6/12/2018 13:17	0.58	mg/L	DO
GN-GSA-MW-12	6/12/2018 13:17	19	mv	Oxidation Reduction Potention
GN-GSA-MW-12	6/12/2018 13:17	7.22	pH	pH
GN-GSA-MW-12	6/12/2018 13:17	20.93	C	Temperature
GN-GSA-MW-12	6/12/2018 13:17	3.08	NTU	Turbidity
GN-GSA-MW-12	6/12/2018 13:22	407.2	uS/cm	Conductivity
GN-GSA-MW-12	6/12/2018 13:22	20.3	ft	Depth to Water Detail
GN-GSA-MW-12	6/12/2018 13:22	0.43	mg/L	DO
GN-GSA-MW-12	6/12/2018 13:22	7.9	mv	Oxidation Reduction Potention
GN-GSA-MW-12	6/12/2018 13:22	7.22	pH	pH
GN-GSA-MW-12	6/12/2018 13:22	20.74	C	Temperature
GN-GSA-MW-12	6/12/2018 13:22	1.74	NTU	Turbidity
GN-GSA-MW-12	6/12/2018 13:27	402.2	uS/cm	Conductivity
GN-GSA-MW-12	6/12/2018 13:27	20.3	ft	Depth to Water Detail
GN-GSA-MW-12	6/12/2018 13:27	0.3	mg/L	DO
GN-GSA-MW-12	6/12/2018 13:27	2.5	mv	Oxidation Reduction Potention
GN-GSA-MW-12	6/12/2018 13:27	7.2	pH	pH
GN-GSA-MW-12	6/12/2018 13:27	20.84	C	Temperature
GN-GSA-MW-12	6/12/2018 13:27	1.78	NTU	Turbidity
GN-GSA-MW-12	6/12/2018 13:32	395.8	uS/cm	Conductivity
GN-GSA-MW-12	6/12/2018 13:32	20.3	ft	Depth to Water Detail
GN-GSA-MW-12	6/12/2018 13:32	0.23	mg/L	DO
GN-GSA-MW-12	6/12/2018 13:32	-3.5	mv	Oxidation Reduction Potention
GN-GSA-MW-12	6/12/2018 13:32	7.19	pH	pH
GN-GSA-MW-12	6/12/2018 13:32	20.78	C	Temperature
GN-GSA-MW-12	6/12/2018 13:32	1.83	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-13	6/12/2018 13:59	492.3	uS/cm	Conductivity
GN-GSA-MW-13	6/12/2018 13:59	24.22	ft	Depth to Water Detail
GN-GSA-MW-13	6/12/2018 13:59	0.56	mg/L	DO
GN-GSA-MW-13	6/12/2018 13:59	20.5	mv	Oxidation Reduction Potention
GN-GSA-MW-13	6/12/2018 13:59	7.09	pH	pH
GN-GSA-MW-13	6/12/2018 13:59	21.57	C	Temperature
GN-GSA-MW-13	6/12/2018 13:59	1.83	NTU	Turbidity
GN-GSA-MW-13	6/12/2018 14:04	490.8	uS/cm	Conductivity
GN-GSA-MW-13	6/12/2018 14:04	24.22	ft	Depth to Water Detail
GN-GSA-MW-13	6/12/2018 14:04	0.53	mg/L	DO
GN-GSA-MW-13	6/12/2018 14:04	20.6	mv	Oxidation Reduction Potention
GN-GSA-MW-13	6/12/2018 14:04	7.08	pH	pH
GN-GSA-MW-13	6/12/2018 14:04	21.36	C	Temperature
GN-GSA-MW-13	6/12/2018 14:04	2.19	NTU	Turbidity
GN-GSA-MW-13	6/12/2018 14:09	488.8	uS/cm	Conductivity
GN-GSA-MW-13	6/12/2018 14:09	24.22	ft	Depth to Water Detail
GN-GSA-MW-13	6/12/2018 14:09	0.52	mg/L	DO
GN-GSA-MW-13	6/12/2018 14:09	21.2	mv	Oxidation Reduction Potention
GN-GSA-MW-13	6/12/2018 14:09	7.09	pH	pH
GN-GSA-MW-13	6/12/2018 14:09	21.33	C	Temperature
GN-GSA-MW-13	6/12/2018 14:09	2.7	NTU	Turbidity
GN-GSA-MW-13	6/12/2018 14:14	487.7	uS/cm	Conductivity
GN-GSA-MW-13	6/12/2018 14:14	24.22	ft	Depth to Water Detail
GN-GSA-MW-13	6/12/2018 14:14	0.51	mg/L	DO
GN-GSA-MW-13	6/12/2018 14:14	21.2	mv	Oxidation Reduction Potention
GN-GSA-MW-13	6/12/2018 14:14	7.09	pH	pH
GN-GSA-MW-13	6/12/2018 14:14	21.4	C	Temperature
GN-GSA-MW-13	6/12/2018 14:14	2.39	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-14S	6/12/2018 18:39	352.2	uS/cm	Conductivity
GN-GSA-MW-14S	6/12/2018 18:39	22.05	ft	Depth to Water Detail
GN-GSA-MW-14S	6/12/2018 18:39	0.3	mg/L	DO
GN-GSA-MW-14S	6/12/2018 18:39	-48.6	mv	Oxidation Reduction Potention
GN-GSA-MW-14S	6/12/2018 18:39	7.52	pH	pH
GN-GSA-MW-14S	6/12/2018 18:39	20.59	C	Temperature
GN-GSA-MW-14S	6/12/2018 18:39	3.42	NTU	Turbidity
GN-GSA-MW-14S	6/12/2018 18:44	352.1	uS/cm	Conductivity
GN-GSA-MW-14S	6/12/2018 18:44	22.05	ft	Depth to Water Detail
GN-GSA-MW-14S	6/12/2018 18:44	0.34	mg/L	DO
GN-GSA-MW-14S	6/12/2018 18:44	-50.2	mv	Oxidation Reduction Potention
GN-GSA-MW-14S	6/12/2018 18:44	7.53	pH	pH
GN-GSA-MW-14S	6/12/2018 18:44	20.51	C	Temperature
GN-GSA-MW-14S	6/12/2018 18:44	3.04	NTU	Turbidity
GN-GSA-MW-14S	6/12/2018 18:49	350.2	uS/cm	Conductivity
GN-GSA-MW-14S	6/12/2018 18:49	22.05	ft	Depth to Water Detail
GN-GSA-MW-14S	6/12/2018 18:49	0.39	mg/L	DO
GN-GSA-MW-14S	6/12/2018 18:49	-50.3	mv	Oxidation Reduction Potention
GN-GSA-MW-14S	6/12/2018 18:49	7.53	pH	pH
GN-GSA-MW-14S	6/12/2018 18:49	20.39	C	Temperature
GN-GSA-MW-14S	6/12/2018 18:49	2.83	NTU	Turbidity
GN-GSA-MW-14S	6/12/2018 18:54	348.5	uS/cm	Conductivity
GN-GSA-MW-14S	6/12/2018 18:54	22.05	ft	Depth to Water Detail
GN-GSA-MW-14S	6/12/2018 18:54	0.44	mg/L	DO
GN-GSA-MW-14S	6/12/2018 18:54	-50.3	mv	Oxidation Reduction Potention
GN-GSA-MW-14S	6/12/2018 18:54	7.53	pH	pH
GN-GSA-MW-14S	6/12/2018 18:54	20.3	C	Temperature
GN-GSA-MW-14S	6/12/2018 18:54	2.86	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-15	6/12/2018 15:28	55.9	uS/cm	Conductivity
GN-GSA-MW-15	6/12/2018 15:28	19.54	ft	Depth to Water Detail
GN-GSA-MW-15	6/12/2018 15:28	1.86	mg/L	DO
GN-GSA-MW-15	6/12/2018 15:28	31.1	mv	Oxidation Reduction Potention
GN-GSA-MW-15	6/12/2018 15:28	6.46	pH	pH
GN-GSA-MW-15	6/12/2018 15:28	22.49	C	Temperature
GN-GSA-MW-15	6/12/2018 15:28	4.2	NTU	Turbidity
GN-GSA-MW-15	6/12/2018 15:33	52.7	uS/cm	Conductivity
GN-GSA-MW-15	6/12/2018 15:33	19.74	ft	Depth to Water Detail
GN-GSA-MW-15	6/12/2018 15:33	2.02	mg/L	DO
GN-GSA-MW-15	6/12/2018 15:33	45.1	mv	Oxidation Reduction Potention
GN-GSA-MW-15	6/12/2018 15:33	6.22	pH	pH
GN-GSA-MW-15	6/12/2018 15:33	22.3	C	Temperature
GN-GSA-MW-15	6/12/2018 15:33	3.62	NTU	Turbidity
GN-GSA-MW-15	6/12/2018 15:38	51.9	uS/cm	Conductivity
GN-GSA-MW-15	6/12/2018 15:38	19.95	ft	Depth to Water Detail
GN-GSA-MW-15	6/12/2018 15:38	2.04	mg/L	DO
GN-GSA-MW-15	6/12/2018 15:38	50.2	mv	Oxidation Reduction Potention
GN-GSA-MW-15	6/12/2018 15:38	6.13	pH	pH
GN-GSA-MW-15	6/12/2018 15:38	22.5	C	Temperature
GN-GSA-MW-15	6/12/2018 15:38	3.15	NTU	Turbidity
GN-GSA-MW-15	6/12/2018 15:43	51.6	uS/cm	Conductivity
GN-GSA-MW-15	6/12/2018 15:43	20.09	ft	Depth to Water Detail
GN-GSA-MW-15	6/12/2018 15:43	1.94	mg/L	DO
GN-GSA-MW-15	6/12/2018 15:43	50.5	mv	Oxidation Reduction Potention
GN-GSA-MW-15	6/12/2018 15:43	6.09	pH	pH
GN-GSA-MW-15	6/12/2018 15:43	23.07	C	Temperature
GN-GSA-MW-15	6/12/2018 15:43	4.38	NTU	Turbidity
GN-GSA-MW-15	6/12/2018 15:48	50.7	uS/cm	Conductivity
GN-GSA-MW-15	6/12/2018 15:48	20.23	ft	Depth to Water Detail
GN-GSA-MW-15	6/12/2018 15:48	1.86	mg/L	DO
GN-GSA-MW-15	6/12/2018 15:48	51.4	mv	Oxidation Reduction Potention
GN-GSA-MW-15	6/12/2018 15:48	6.07	pH	pH
GN-GSA-MW-15	6/12/2018 15:48	23.16	C	Temperature
GN-GSA-MW-15	6/12/2018 15:48	2.55	NTU	Turbidity
GN-GSA-MW-15	6/12/2018 15:54	50.7	uS/cm	Conductivity
GN-GSA-MW-15	6/12/2018 15:54	20.29	ft	Depth to Water Detail
GN-GSA-MW-15	6/12/2018 15:54	1.84	mg/L	DO
GN-GSA-MW-15	6/12/2018 15:54	51.5	mv	Oxidation Reduction Potention
GN-GSA-MW-15	6/12/2018 15:54	6.05	pH	pH
GN-GSA-MW-15	6/12/2018 15:54	22.49	C	Temperature
GN-GSA-MW-15	6/12/2018 15:54	2.63	NTU	Turbidity

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

Analytical Report



Sample Group : WMWGASG_1176
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

The following data has been reviewed and approved by:

Quality Control:

Laura Midkiff

Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Power
Company, ou=Environmental Affairs,
email=lbmidkif@southernco.com, c=US
Date: 2018.11.26 15:36:42 -06'00'

Supervision: T. Durant
Maske

Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama
Power Company, ou=Environmental
Affairs, email=tdmaske@southernco.com,
c=US
Date: 2018.11.29 07:58:51 -06'00'



Metals ICP

Gaston Gypsum

WMWGASG_1176

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY25233	632110	WMWGASG_1176
AY25234	632110	WMWGASG_1176
AY25235	632110	WMWGASG_1176
AY25236	632110	WMWGASG_1176
AY25237	632110	WMWGASG_1176
AY25238	632110	WMWGASG_1176
AY25239	632110	WMWGASG_1176
AY25240	632110	WMWGASG_1176
AY25241	632110	WMWGASG_1176
AY25242	632110	WMWGASG_1176
AY25243	632111	WMWGASG_1176
AY25244	632111	WMWGASG_1176
AY25245	632111	WMWGASG_1176
AY25246	632111	WMWGASG_1176
AY25247	632111	WMWGASG_1176
AY25367	632111	WMWGASG_1176
AY25368	632111	WMWGASG_1176
AY25369	632111	WMWGASG_1176
AY25370	632111	WMWGASG_1176

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



General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. All samples were analyzed at a x2.03 dilution to compensate for potential matrix effects except for the following:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution</u>
AY25238	Calcium	x10.15
AY25243	Calcium	x10.15
AY25368	Calcium	x10.15

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



Metals ICPMS

Gaston Gypsum

WMWGASG_1176

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY25233	631149	WMWGASG_1176
AY25234	631149	WMWGASG_1176
AY25235	631149	WMWGASG_1176
AY25236	631149	WMWGASG_1176
AY25237	631149	WMWGASG_1176
AY25238	631149	WMWGASG_1176
AY25239	631149	WMWGASG_1176
AY25240	631149	WMWGASG_1176
AY25241	631149	WMWGASG_1176
AY25242	631149	WMWGASG_1176
AY25243	631150	WMWGASG_1176
AY25244	631150	WMWGASG_1176
AY25245	631150	WMWGASG_1176
AY25246	631150	WMWGASG_1176
AY25247	631150	WMWGASG_1176
AY25367	631150	WMWGASG_1176
AY25368	631150	WMWGASG_1176
AY25369	631150	WMWGASG_1176
AY25370	631150	WMWGASG_1176

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



General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.
7. All samples were analyzed at a dilution of 1 to 5.075 to compensate for any matrix.
 8. The raw data results are shown with dilution factors included.



Mercury

Gaston Gypsum

WMWGASG_1176

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY25233	631371	WMWGASG_1176
AY25234	631371	WMWGASG_1176
AY25235	631371	WMWGASG_1176
AY25236	631371	WMWGASG_1176
AY25237	631371	WMWGASG_1176
AY25238	631371	WMWGASG_1176
AY25239	631371	WMWGASG_1176
AY25240	631371	WMWGASG_1176
AY25241	631371	WMWGASG_1176
AY25242	631371	WMWGASG_1176
AY25243	631372	WMWGASG_1176
AY25244	631372	WMWGASG_1176
AY25245	631372	WMWGASG_1176
AY25246	631372	WMWGASG_1176
AY25247	631372	WMWGASG_1176
AY25367	631372	WMWGASG_1176
AY25368	631372	WMWGASG_1176
AY25369	631372	WMWGASG_1176
AY25370	631372	WMWGASG_1176

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



General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

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

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



TDS

Gaston Gypsum

WMWGASG_1176

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

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AY25233	631290	WMWGASG_1176
AY25234	631290	WMWGASG_1176
AY25235	631290	WMWGASG_1176
AY25236	631290	WMWGASG_1176
AY25237	631290	WMWGASG_1176
AY25238	631290	WMWGASG_1176
AY25239	631290	WMWGASG_1176
AY25240	631352	WMWGASG_1176
AY25241	631352	WMWGASG_1176
AY25242	631352	WMWGASG_1176
AY25243	631352	WMWGASG_1176
AY25244	631352	WMWGASG_1176
AY25245	631290	WMWGASG_1176
AY25246	631290	WMWGASG_1176
AY25247	631352	WMWGASG_1176
AY25367	631352	WMWGASG_1176
AY25368	631352	WMWGASG_1176
AY25369	631352	WMWGASG_1176
AY25370	631352	WMWGASG_1176

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



General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
 - AY25234
 - AY25246
 - AY25369
 - AY25370

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY25233

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	J 0.00188	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0711	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	J 0.0456	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	60.6	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	J 0.00490	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	292	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY25233

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec
				Limit	Spike				Limit	Rec	Limit	Prec	
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115	105	70 to 130	2.10	20
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.23	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115	89.0	70 to 130	1.70	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115	100	70 to 130	1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115	90.1	70 to 130	4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115	88.6	70 to 130	0.648	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115	112	70 to 130	0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15	98.5	70 to 130	0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115	95.8	70 to 130	3.12	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115	105	70 to 130	1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115	105	70 to 130	0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115	112	70 to 130	1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23	103	70 to 130	0.487	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75	82.0	70 to 130	0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046	77.7	70 to 130	1.06	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY25233

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Prec	Prec	Limit
								Duplicate	LCS			Rec	Limit	Prec	Limit
AY25246	Solids, Dissolved	mg/L	0.0000	25				0.67	52.0	40 to 60			0.00	5	

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Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY25234

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0185	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	0.790	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: TDS result is qualified due to sample did not meet the 2.5mg requirement. Max volume of 150mL was filtered. LBM 11/13/18

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY25234

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.23	20
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115	105	70 to 130	2.10	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115	89.0	70 to 130	1.70	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75	82.0	70 to 130	0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046	77.7	70 to 130	1.06	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115	100	70 to 130	1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115	90.1	70 to 130	4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115	88.6	70 to 130	0.648	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115	105	70 to 130	1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115	105	70 to 130	0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115	112	70 to 130	1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23	103	70 to 130	0.487	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115	112	70 to 130	0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15	98.5	70 to 130	0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115	95.8	70 to 130	3.12	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: TDS result is qualified due to sample did not meet the 2.5mg requirement. Max volume of 150mL was filtered. LBM 11/13/18

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY25234

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AY25246	Solids, Dissolved	mg/L	0.0000	25			0.67	52.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: TDS result is qualified due to sample did not meet the 2.5mg requirement. Max volume of 150mL was filtered. LBM 11/13/18

CC:

Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
 Calera, AL 35040
 (205) 664-6032 or 6171
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY25235

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0228	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	70.3	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	209	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY25235

Sample	Analysis	Units	MB	MB			LCS			Rec		Prec	
				Limit	Spike	MS	MSD	LCS	Limit	Rec	Limit	Prec	Limit
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.23	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115	89.0	70 to 130	1.70	20
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115	105	70 to 130	2.10	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75	82.0	70 to 130	0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046	77.7	70 to 130	1.06	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115	112	70 to 130	0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15	98.5	70 to 130	0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115	95.8	70 to 130	3.12	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115	105	70 to 130	1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115	105	70 to 130	0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115	112	70 to 130	1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23	103	70 to 130	0.487	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115	100	70 to 130	1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115	90.1	70 to 130	4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115	88.6	70 to 130	0.648	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY25235

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY25246	Solids, Dissolved	mg/L	0.0000		25			0.67	52.0		40 to 60			0.00		5

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY25236

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	J 0.00150	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0314	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	55.4	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	J 0.00359	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	184	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY25236

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115		105	70 to 130	2.10	20
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115		100	70 to 130	4.23	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115		89.0	70 to 130	1.70	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75		82.0	70 to 130	0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046		77.7	70 to 130	1.06	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115		112	70 to 130	0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15		98.5	70 to 130	0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115		95.8	70 to 130	3.12	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115		100	70 to 130	1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115		90.1	70 to 130	4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115		88.6	70 to 130	0.648	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115		105	70 to 130	1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115		105	70 to 130	0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115		112	70 to 130	1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23		103	70 to 130	0.487	20

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Laboratory certification ID: E571114

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Comments:

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 744 County Road 87, GSC#8
 Calera, AL 35040
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY25236

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY25246	Solids, Dissolved	mg/L	0.0000		25			0.67	52.0		40 to 60			0.00		5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY25237

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0265	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	52.4	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	177	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY25237

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit	
			Limit	MB					Limit	Rec	Limit	Prec			
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115		105	70 to 130		2.10	20
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115		100	70 to 130		4.23	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115		89.0	70 to 130		1.70	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115		100	70 to 130		1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115		90.1	70 to 130		4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115		88.6	70 to 130		0.648	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115		112	70 to 130		0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15		98.5	70 to 130		0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115		95.8	70 to 130		3.12	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75		82.0	70 to 130		0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046		77.7	70 to 130		1.06	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115		105	70 to 130		1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115		105	70 to 130		0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115		112	70 to 130		1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23		103	70 to 130		0.487	20

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Laboratory certification ID: E571114

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY25237

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY25246	Solids, Dissolved	mg/L	0.0000		25			0.67	52.0		40 to 60			0.00		5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY25238

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0324	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		10.15	1.015	5.075	96.9	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	278	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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Laboratory certification ID: E571114

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Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY25238

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.23	20
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115	105	70 to 130	2.10	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115	89.0	70 to 130	1.70	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75	82.0	70 to 130	0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046	77.7	70 to 130	1.06	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115	112	70 to 130	0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15	98.5	70 to 130	0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115	95.8	70 to 130	3.12	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115	105	70 to 130	1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115	105	70 to 130	0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115	112	70 to 130	1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23	103	70 to 130	0.487	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115	100	70 to 130	1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115	90.1	70 to 130	4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115	88.6	70 to 130	0.648	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY25238

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec
								Duplicate	LCS			Limit	Limit		Limit
AY25246	Solids, Dissolved	mg/L	0.0000		25			0.67	52.0		40 to 60			0.00	5

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Comments:

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY25239

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	J 0.00948	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	5.94	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	27.3	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY25239

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115		105	70 to 130		2.10	20
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115		100	70 to 130		4.23	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115		89.0	70 to 130		1.70	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75		82.0	70 to 130		0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046		77.7	70 to 130		1.06	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115		100	70 to 130		1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115		90.1	70 to 130		4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115		88.6	70 to 130		0.648	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115		112	70 to 130		0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15		98.5	70 to 130		0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115		95.8	70 to 130		3.12	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115		105	70 to 130		1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115		105	70 to 130		0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115		112	70 to 130		1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23		103	70 to 130		0.487	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY25239

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY25246	Solids, Dissolved	mg/L	0.0000		25			0.67	52.0		40 to 60			0.00		5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY25240

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0350	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	68.8	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	215	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY25240

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.23	20
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115	105	70 to 130	2.10	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115	89.0	70 to 130	1.70	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75	82.0	70 to 130	0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046	77.7	70 to 130	1.06	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115	105	70 to 130	1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115	105	70 to 130	0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115	112	70 to 130	1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23	103	70 to 130	0.487	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115	100	70 to 130	1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115	90.1	70 to 130	4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115	88.6	70 to 130	0.648	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115	112	70 to 130	0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15	98.5	70 to 130	0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115	95.8	70 to 130	3.12	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY25240

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY25370	Solids, Dissolved	mg/L	0.0000		25			0.67	49.0		40 to 60			0.00		5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY25241

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0320	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	44.4	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	204	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY25241

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.23	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115	89.0	70 to 130	1.70	20
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115	105	70 to 130	2.10	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75	82.0	70 to 130	0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046	77.7	70 to 130	1.06	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115	112	70 to 130	0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15	98.5	70 to 130	0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115	95.8	70 to 130	3.12	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115	105	70 to 130	1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115	105	70 to 130	0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115	112	70 to 130	1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23	103	70 to 130	0.487	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115	100	70 to 130	1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115	90.1	70 to 130	4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115	88.6	70 to 130	0.648	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY25241

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Prec	Prec	Limit
								Duplicate	LCS			Rec	Limit	Prec	Limit
AY25370	Solids, Dissolved	mg/L	0.0000	25				0.67	49.0	40 to 60			0.00	5	

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY25242

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0176	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	J 0.0347	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	64.3	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	201	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY25242

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit	
			Limit	MB					Limit	Rec	Limit	Prec			
AY25242	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.105	0.107	0.112	0.085 to 0.115		105	70 to 130		2.10	20
AY25242	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.100	0.105	0.101	0.085 to 0.115		100	70 to 130		4.23	20
AY25242	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0890	0.0905	0.0911	0.085 to 0.115		89.0	70 to 130		1.70	20
AY25242	Calcium, Total	mg/L	-0.00268	0.22	5.00	68.4	68.7	4.92	4.25 to 5.75		82.0	70 to 130		0.438	20
AY25242	Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00311	0.00307	0.00402	0.0034 to 0.0046		77.7	70 to 130		1.06	20
AY25242	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.112	0.111	0.113	0.085 to 0.115		112	70 to 130		0.696	20
AY25242	Boron, Total	mg/L	0.000649	0.044	1.00	1.02	1.01	0.992	0.85 to 1.15		98.5	70 to 130		0.985	20
AY25242	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0958	0.0989	0.0930	0.085 to 0.115		95.8	70 to 130		3.12	20
AY25242	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.100	0.102	0.0974	0.085 to 0.115		100	70 to 130		1.90	20
AY25242	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0901	0.0947	0.0897	0.085 to 0.115		90.1	70 to 130		4.93	20
AY25242	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0886	0.0880	0.0979	0.085 to 0.115		88.6	70 to 130		0.648	20
AY25242	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.105	0.103	0.102	0.085 to 0.115		105	70 to 130		1.36	20
AY25242	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.122	0.124	0.0955	0.085 to 0.115		105	70 to 130		0.876	20
AY25242	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.112	0.113	0.107	0.085 to 0.115		112	70 to 130		1.31	20
AY25242	Lithium, Total	mg/L	0.0000529	0.022	0.200	0.206	0.205	0.196	0.17 to 0.23		103	70 to 130		0.487	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY25242

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY25370	Solids, Dissolved	mg/L	0.0000		25			0.67	49.0		40 to 60			0.00		5

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Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY25243

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0457	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		10.15	1.015	5.075	97.6	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	279	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY25243

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec	Limit
			MB	Limit						Rec	Limit		
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115	99.3	70 to 130	2.33	20
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115	94.9	70 to 130	0.0616	20
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15	94.8	70 to 130	1.47	20
AY25247	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115	90.9	70 to 130	1.69	20
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115	89.4	70 to 130	1.17	20
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115	104	70 to 130	6.96	20
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115	100	70 to 130	2.01	20
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115	111	70 to 130	6.22	20
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115	90.7	70 to 130	0.315	20
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75	96.6	70 to 130	0.623	20
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23	93.5	70 to 130	1.59	20
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046	84.0	70 to 130	1.17	20
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.859	20
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115	102	70 to 130	0.780	20
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115	110	70 to 130	3.93	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY25243

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Prec	Prec	Limit
								Duplicate	LCS			Rec	Limit	Prec	Limit
AY25370	Solids, Dissolved	mg/L	0.0000	25				0.67	49.0	40 to 60			0.00	5	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY25244

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.00829	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	2.22	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	J 0.0345	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	38.9	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	J 0.00600	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	195	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY25244

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit
				Limit	Spike				Limit	Rec	Limit	Prec		
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115		99.3	70 to 130	2.33	20
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15		94.8	70 to 130	1.47	20
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115		94.9	70 to 130	0.0616	20
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115		104	70 to 130	6.96	20
AY25247	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115		90.9	70 to 130	1.69	20
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115		89.4	70 to 130	1.17	20
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75		96.6	70 to 130	0.623	20
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23		93.5	70 to 130	1.59	20
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046		84.0	70 to 130	1.17	20
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115		113	70 to 130	0.859	20
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115		102	70 to 130	0.780	20
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115		110	70 to 130	3.93	20
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115		100	70 to 130	2.01	20
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115		111	70 to 130	6.22	20
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115		90.7	70 to 130	0.315	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY25244

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec
								Duplicate	LCS			Limit	Limit	Prec	Limit
AY25370	Solids, Dissolved	mg/L	0.0000	25				0.67	49.0	40 to 60				0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6 DUP

Laboratory ID Number: AY25245

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0148	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	0.804	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: Max volume of 150mL was filtered. LBM 11/13/18

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6 DUP

Laboratory ID Number: AY25245

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115		104	70 to 130	6.96	20
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115		94.9	70 to 130	0.0616	20
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115		99.3	70 to 130	2.33	20
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15		94.8	70 to 130	1.47	20
AY25247	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115		90.9	70 to 130	1.69	20
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115		89.4	70 to 130	1.17	20
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115		100	70 to 130	2.01	20
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115		111	70 to 130	6.22	20
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115		90.7	70 to 130	0.315	20
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75		96.6	70 to 130	0.623	20
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23		93.5	70 to 130	1.59	20
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046		84.0	70 to 130	1.17	20
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115		113	70 to 130	0.859	20
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115		102	70 to 130	0.780	20
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115		110	70 to 130	3.93	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: Max volume of 150mL was filtered. LBM 11/13/18

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6 DUP

Laboratory ID Number: AY25245

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY25246	Solids, Dissolved	mg/L	0.0000	25				0.67	52.0	40 to 60				0.00	5	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: Max volume of 150mL was filtered. LBM 11/13/18

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25246

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CRB	10/25/2018	SM 2540C		1			10/25/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25246

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115	94.9	70 to 130	0.0616	20
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115	104	70 to 130	6.96	20
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115	99.3	70 to 130	2.33	20
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15	94.8	70 to 130	1.47	20
AY25247	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115	90.9	70 to 130	1.69	20
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115	89.4	70 to 130	1.17	20
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75	96.6	70 to 130	0.623	20
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23	93.5	70 to 130	1.59	20
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046	84.0	70 to 130	1.17	20
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115	100	70 to 130	2.01	20
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115	111	70 to 130	6.22	20
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115	90.7	70 to 130	0.315	20
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.859	20
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115	102	70 to 130	0.780	20
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115	110	70 to 130	3.93	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25246

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec
								Duplicate	LCS			Limit	Limit	Prec	Limit
AY25246	Solids, Dissolved	mg/L	0.0000	25				0.67	52.0	40 to 60				0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12 DUP

Laboratory ID Number: AY25247

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	J 0.00110	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0204	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	J 0.0329	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	64.6	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	203	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12 DUP

Laboratory ID Number: AY25247

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15	94.8	70 to 130	1.47	20
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115	94.9	70 to 130	0.0616	20
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115	99.3	70 to 130	2.33	20
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115	104	70 to 130	6.96	20
AY25247	Lead, Total	mg/L	0.0000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115	90.9	70 to 130	1.69	20
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115	89.4	70 to 130	1.17	20
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115	100	70 to 130	2.01	20
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115	111	70 to 130	6.22	20
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115	90.7	70 to 130	0.315	20
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75	96.6	70 to 130	0.623	20
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23	93.5	70 to 130	1.59	20
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046	84.0	70 to 130	1.17	20
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.859	20
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115	102	70 to 130	0.780	20
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115	110	70 to 130	3.93	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12 DUP

Laboratory ID Number: AY25247

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec
								Duplicate	LCS			Limit	Limit	Prec	Limit
AY25370	Solids, Dissolved	mg/L	0.0000	25				0.67	49.0	40 to 60				0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY25367

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	J 0.00522	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	J 0.0416	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	7.73	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	J 0.00286	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	68.0	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY25367

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit
				Limit	Spike				Limit	Rec	Limit	Prec		
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115	99.3	70 to 130	2.33	20	
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15	94.8	70 to 130	1.47	20	
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115	94.9	70 to 130	0.0616	20	
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115	104	70 to 130	6.96	20	
AY25247	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115	90.9	70 to 130	1.69	20	
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115	89.4	70 to 130	1.17	20	
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75	96.6	70 to 130	0.623	20	
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23	93.5	70 to 130	1.59	20	
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046	84.0	70 to 130	1.17	20	
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115	100	70 to 130	2.01	20	
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115	111	70 to 130	6.22	20	
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115	90.7	70 to 130	0.315	20	
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.859	20	
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115	102	70 to 130	0.780	20	
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115	110	70 to 130	3.93	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY25367

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Rec	Prec	Prec	Limit
								Duplicate	LCS			Limit	Limit			
AY25370	Solids, Dissolved	mg/L	0.0000	25				0.67	49.0	40 to 60				0.00	5	

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Laboratory certification ID: E571114

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Expiration: June 30, 2019

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CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY25368

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	0.0393	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		10.15	1.015	5.075	104	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	265	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY25368

Sample	Analysis	Units	MB	MB				LCS		Rec		Prec	
				Limit	Spike	MS	MSD	LCS	Limit	Rec	Limit	Prec	
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15	94.8	70 to 130	1.47	20
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115	99.3	70 to 130	2.33	20
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115	94.9	70 to 130	0.0616	20
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115	104	70 to 130	6.96	20
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75	96.6	70 to 130	0.623	20
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23	93.5	70 to 130	1.59	20
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046	84.0	70 to 130	1.17	20
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115	100	70 to 130	2.01	20
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115	111	70 to 130	6.22	20
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115	90.7	70 to 130	0.315	20
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.859	20
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115	102	70 to 130	0.780	20
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115	110	70 to 130	3.93	20
AY25247	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115	90.9	70 to 130	1.69	20
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115	89.4	70 to 130	1.17	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY25368

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LCS	LCS	Rec	Prec	Prec	
			Limit	Limit			Duplicate	LCS	Limit	Rec	Limit	Limit	
AY25370	Solids, Dissolved	mg/L	0.0000	25			0.67	49.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25369

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25369

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115		99.3	70 to 130	2.33	20
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15		94.8	70 to 130	1.47	20
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115		94.9	70 to 130	0.0616	20
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115		104	70 to 130	6.96	20
AY25247	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115		90.9	70 to 130	1.69	20
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115		89.4	70 to 130	1.17	20
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115		100	70 to 130	2.01	20
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115		111	70 to 130	6.22	20
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115		90.7	70 to 130	0.315	20
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75		96.6	70 to 130	0.623	20
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23		93.5	70 to 130	1.59	20
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046		84.0	70 to 130	1.17	20
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115		113	70 to 130	0.859	20
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115		102	70 to 130	0.780	20
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115		110	70 to 130	3.93	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25369

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LCS	LCS	Limit	Rec	Prec	Prec	Limit
								Duplicate	LCS			Rec	Limit	Prec	Limit
AY25370	Solids, Dissolved	mg/L	0.0000		25			0.67	49.0		40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY25370

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	GAS	10/31/2018	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CRB	10/30/2018	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CRB	10/26/2018	SM 2540C		1			10/26/2018	Date

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY25370

Sample	Analysis	Units	MB	MB				LCS		Rec		Prec	
				Limit	Spike	MS	MSD	LCS	Limit	Rec	Limit	Prec	Limit
AY25247	Chromium, Total	mg/L	0.0000208	0.0044	0.10	0.0949	0.0950	0.0930	0.085 to 0.115	94.9	70 to 130	0.0616	20
AY25247	Barium, Total	mg/L	0.0000302	0.0044	0.10	0.120	0.117	0.0955	0.085 to 0.115	99.3	70 to 130	2.33	20
AY25247	Antimony, Total	mg/L	0.0000510	0.00176	0.10	0.104	0.0973	0.102	0.085 to 0.115	104	70 to 130	6.96	20
AY25370	Boron, Total	mg/L	0.000448	0.044	1.00	0.948	0.962	0.971	0.85 to 1.15	94.8	70 to 130	1.47	20
AY25370	Calcium, Total	mg/L	-0.000845	0.22	5.00	4.83	4.80	4.87	4.25 to 5.75	96.6	70 to 130	0.623	20
AY25370	Lithium, Total	mg/L	0.0000534	0.022	0.200	0.187	0.190	0.189	0.17 to 0.23	93.5	70 to 130	1.59	20
AY25370	Mercury, Total by CVAA	mg/L	0.000109	0.0005	0.004	0.00336	0.00340	0.00380	0.0034 to 0.0046	84.0	70 to 130	1.17	20
AY25247	Lead, Total	mg/L	0.00000437	0.0022	0.10	0.0909	0.0894	0.0911	0.085 to 0.115	90.9	70 to 130	1.69	20
AY25247	Molybdenum, Total	mg/L	0.0000187	0.0044	0.10	0.0894	0.0884	0.0897	0.085 to 0.115	89.4	70 to 130	1.17	20
AY25247	Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.101	0.0993	0.101	0.085 to 0.115	100	70 to 130	2.01	20
AY25247	Cadmium, Total	mg/L	0.0000303	0.00066	0.10	0.111	0.104	0.107	0.085 to 0.115	111	70 to 130	6.22	20
AY25247	Thallium, Total	mg/L	0.0000142	0.00044	0.10	0.0907	0.0909	0.0979	0.085 to 0.115	90.7	70 to 130	0.315	20
AY25247	Beryllium, Total	mg/L	0.0000312	0.00132	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.859	20
AY25247	Cobalt, Total	mg/L	0.0000233	0.0044	0.10	0.102	0.103	0.0974	0.085 to 0.115	102	70 to 130	0.780	20
AY25247	Selenium, Total	mg/L	0.0000844	0.0044	0.10	0.110	0.115	0.112	0.085 to 0.115	110	70 to 130	3.93	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY25370

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LCS	Rec	Prec	
			Limit	Limit			Duplicate	LCS	Limit	Limit	Limit
AY25370	Solids, Dissolved	mg/L	0.0000	25			0.67	49.0	40 to 60		0.00 5

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

CC:

Definitions



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

Qualifier	Description
B	Analyte found in reagent blank. Indicates possible reagent or background contamination.
E	Estimated reported value exceeded calibration range.
J	Reported value is an estimate because concentration is less than reporting limit.
N	Organic constituents tentatively identified. Confirmation is needed.
R	Matrix spike recovery is out of range.
U	Compound was analyzed, but not detected.
P	Precision is out of range.
C	Analyte was verified by re-analysis.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.
L	Check standard is outside of the required specification limit.
D	All samples were stored at less than or equal to 6 °C and for no longer than 48 hours from time of sampling, unless otherwise noted.
F	Water Field Group (WFG) qualifier; see comments for more information



Chain of Custody

Groundwater

APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA **10/23/2018 17:40**

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Tanisha Fenderson	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gaston Gypsum

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

Comments: Relinquished to Biology Shipping Lab secure location GSC Building 8

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	10/22/18	09:57	3	Groundwater		AY25233
MW-6	10/22/2018	10:56	3	Groundwater		AY25234
MW-7	10/22/2018	12:17	3	Groundwater		AY25235
MW-8	10/22/2018	13:50	3	Groundwater		AY25236
MW-9	10/22/2018	15:10	3	Groundwater		AY25237
MW-2	10/22/2018	17:08	3	Groundwater		AY25238
MW-15	10/23/2018	09:11	3	Groundwater		AY25239
MW-3	10/23/2018	10:50	3	Groundwater		AY25240
MW-14S	10/23/2018	11:56	3	Groundwater		AY25241
MW-12	10/23/2018	12:53	3	Groundwater		AY25242
MW-13	10/23/2018	13:52	3	Groundwater		AY25243
MW-1	10/23/2018	14:45	3	Groundwater		AY25244
MW-6DUP	10/22/2018	10:56	3	Sample Duplicate		AY25245
FB-1	10/22/2018	16:40	3	Field Blank		AY25246
MW-12DUP	10/23/2018	12:53	3	Sample Duplicate		AY25247

Relinquished By	Received By	Date/Time
	Laura Midkiff <small>Digitally signed by Laura Midkiff DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lmidkiff@southernco.com, c=US Date: 2018.10.24 07:33:33 -05'00'</small>	10/24/2018 07:33

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	
Sample Event	1176	
Cooler Temp	0.3 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	6959-37696-30-17	



Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA 10/24/2018 15:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Tanisha Fenderson	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Gaston Gypsum

Bottles	1	Metals	500 mL	3	TDS	500 mL	5	N/A	N/A	7	N/A	N/A
	2	Hg	250 mL	4	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-11	10/24/18	11:28	3	Groundwater		AY25367
MW-10	10/24/2018	13:05	3	Groundwater		AY25368
FB-2	10/24/2018	11:50	3	Field Blank		AY25369
EB-1	10/24/2018	13:40	3	Equipment Blank		AY25370

Relinquished By	Received By	Date/Time
		10/24/2018 15:57

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/> Cooler Temp 0.3 degrees C Thermometer ID 5408-27568-2-2 pH Strip ID 6959-37696-30-17
Turbidity ID	3901-20009-2-1	
Sample Event	1176	



Chain of Custody
Groundwater
APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA **10/23/2018 17:40**

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Tanisha Fenderson	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gaston Gypsum

Bottles	1 Radium	1 L	3 N/A	N/A	5 N/A	N/A	7 N/A	N/A
	2 Anions	250 mL	4 N/A	N/A	6 N/A	N/A	8 N/A	N/A

Comments: Radium Duplicate collected MW5; Test America. Relinquished to secure location Biology Shipping Lab GSC Building 8

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	10/22/18	09:57	4	Groundwater		AY25248
MW-6	10/22/2018	10:56	2	Groundwater		AY25249
MW-7	10/22/2018	12:17	2	Groundwater		AY25250
MW-8	10/22/2018	13:50	2	Groundwater		AY25251
MW-9	10/22/2018	15:10	2	Groundwater		AY25252
MW-2	10/22/2018	17:08	2	Groundwater		AY25253
MW-15	10/23/2018	09:11	2	Groundwater		AY25254
MW-3	10/23/2018	10:50	2	Groundwater		AY25255
MW-14S	10/23/2018	11:56	2	Groundwater		AY25256
MW-12	10/23/2018	12:53	2	Groundwater		AY25257
MW-13	10/23/2018	13:52	2	Groundwater		AY25258
MW-1	10/23/2018	14:45	2	Groundwater		AY25259
MW-6DUP	10/22/2018	10:56	2	Sample Duplicate		AY25260
FB-1	10/22/2018	16:40	2	Field Blank		AY25261
MW-12DUP	10/23/2018	12:53	2	Sample Duplicate		AY25262

Relinquished By	Received By	Date/Time
	Laura Midkiff <small>Digitally signed by Laura Midkiff DN: cn=Laura Midkiff, ou=Alabama Power Company, ou=Environmental Affairs, email=lmidkiff@southernco.com, c=US Date: 2018.10.24 07:34:04 -05'00'</small>	10/24/2018 07:34

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	
Sample Event	1176	
Cooler Temp	0.3 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	6959-37696-30-17	



Chain of Custody
Groundwater
 APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA 10/24/2018 15:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Tanisha Fenderson	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Gaston Gypsum

Bottles	1 Radium	1 L	3 N/A	N/A	5 N/A	N/A	7 N/A	N/A
	2 Anions	250 mL	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-11	10/24/18	11:28	2	Groundwater		AY25371
MW-10	10/24/2018	13:05	2	Groundwater		AY25372
FB-2	10/24/2018	11:50	2	Field Blank		AY25373
EB-1	10/24/2018	13:40	2	Equipment Blank		AY25374

Relinquished By	Received By	Date/Time
		10/24/2018 15:58

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	3901-20009-2-1	Cooler Temp	0.3 degrees C
Sample Event	1176	Thermometer ID	5408-27568-2-2
		pH Strip ID	6959-37696-30-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-161261-1

TestAmerica Sample Delivery Group: Gaston Gypsum 1176

Client Project/Site: CCR Plant Gaston

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Laura Midkiff



Authorized for release by:

11/8/2018 4:16:53 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Job ID: 400-161261-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-161261-1

General Chemistry

Method(s) SM 4500 F C: The sample duplicate precision for the following sample associated with analytical batch 417824 was outside control limits: (400-160851-A-4 DU). The associated Laboratory Control Sample(LCS) met acceptance criteria.

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 418722 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) SM 4500 SO4 E: Due to the concentration of sulfates in the parent sample the MS/MSD were diluted after the spike. The spike amounts were adjusted by the dilution factor. (400-161135-B-1 MS) and (400-161135-B-1 MSD)

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 418748 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: AY25248 MW-5 (400-161261-1), (400-161135-B-1), (400-161135-B-1 MS) and (400-161135-B-1 MSD). Elevated reporting limits (RLs) are provided.

Detection Summary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Client Sample ID: AY25248 MW-5

Lab Sample ID: 400-161261-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	40		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25249 MW-6

Lab Sample ID: 400-161261-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.6		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AY25250 MW-7

Lab Sample ID: 400-161261-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.7		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.10		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	8.8		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25251 MW-8

Lab Sample ID: 400-161261-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.15		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	2.2	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25252 MW-9

Lab Sample ID: 400-161261-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.0		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	5.1		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25253 MW-2

Lab Sample ID: 400-161261-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.6		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	8.3		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25254 MW-15

Lab Sample ID: 400-161261-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.5	J	2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AY25255 MW-3

Lab Sample ID: 400-161261-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.6		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	12		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25256 MW-14S

Lab Sample ID: 400-161261-9

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Client Sample ID: AY25256 MW-14S (Continued)

Lab Sample ID: 400-161261-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.4		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.070	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	5.4		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25257 MW-12

Lab Sample ID: 400-161261-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	4.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25258 MW-13

Lab Sample ID: 400-161261-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.5		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	6.7		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25259 MW-1

Lab Sample ID: 400-161261-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.39		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25260 MW-6 DUP

Lab Sample ID: 400-161261-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.4		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AY25261 FB-1

Lab Sample ID: 400-161261-14

No Detections.

Client Sample ID: AY25262 MW-12 DUP

Lab Sample ID: 400-161261-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.6		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	5.0		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25371 MW-11

Lab Sample ID: 400-161261-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.2		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AY25372 MW-10

Lab Sample ID: 400-161261-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.9		2.0	1.4	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Client Sample ID: AY25373 FB-2

Lab Sample ID: 400-161261-18

No Detections.

Client Sample ID: AY25374 EB-1

Lab Sample ID: 400-161261-19

No Detections.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Method	Method Description	Protocol	Laboratory
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN
SM 4500 F C	Fluoride	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



Sample Summary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-161261-1	AY25248 MW-5	Water	10/22/18 09:57	10/29/18 16:45
400-161261-2	AY25249 MW-6	Water	10/22/18 10:56	10/29/18 16:45
400-161261-3	AY25250 MW-7	Water	10/22/18 12:17	10/29/18 16:45
400-161261-4	AY25251 MW-8	Water	10/22/18 13:50	10/29/18 16:45
400-161261-5	AY25252 MW-9	Water	10/22/18 15:10	10/29/18 16:45
400-161261-6	AY25253 MW-2	Water	10/22/18 17:08	10/29/18 16:45
400-161261-7	AY25254 MW-15	Water	10/23/18 09:11	10/29/18 16:45
400-161261-8	AY25255 MW-3	Water	10/23/18 10:50	10/29/18 16:45
400-161261-9	AY25256 MW-14S	Water	10/23/18 11:56	10/29/18 16:45
400-161261-10	AY25257 MW-12	Water	10/23/18 12:53	10/29/18 16:45
400-161261-11	AY25258 MW-13	Water	10/23/18 13:52	10/29/18 16:45
400-161261-12	AY25259 MW-1	Water	10/23/18 14:45	10/29/18 16:45
400-161261-13	AY25260 MW-6 DUP	Water	10/22/18 10:56	10/29/18 16:45
400-161261-14	AY25261 FB-1	Water	10/22/18 16:40	10/29/18 16:45
400-161261-15	AY25262 MW-12 DUP	Water	10/23/18 12:53	10/29/18 16:45
400-161261-16	AY25371 MW-11	Water	10/24/18 11:28	10/29/18 16:45
400-161261-17	AY25372 MW-10	Water	10/24/18 13:05	10/29/18 16:45
400-161261-18	AY25373 FB-2	Water	10/24/18 11:50	10/29/18 16:45
400-161261-19	AY25374 EB-1	Water	10/24/18 13:40	10/29/18 16:45

Client Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25248 MW-5

Lab Sample ID: 400-161261-1

Date Collected: 10/22/18 09:57

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0	1.4	mg/L			11/07/18 14:36	1
Fluoride	0.060	J	0.10	0.032	mg/L			10/31/18 13:09	1
Sulfate	40		10	2.8	mg/L			11/07/18 16:56	2

Client Sample ID: AY25249 MW-6

Lab Sample ID: 400-161261-2

Date Collected: 10/22/18 10:56

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		2.0	1.4	mg/L			11/07/18 14:36	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 13:13	1
Sulfate	<1.4		5.0	1.4	mg/L			11/07/18 16:10	1

Client Sample ID: AY25250 MW-7

Lab Sample ID: 400-161261-3

Date Collected: 10/22/18 12:17

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		2.0	1.4	mg/L			11/07/18 14:36	1
Fluoride	0.10		0.10	0.032	mg/L			10/31/18 13:17	1
Sulfate	8.8		5.0	1.4	mg/L			11/07/18 16:11	1

Client Sample ID: AY25251 MW-8

Lab Sample ID: 400-161261-4

Date Collected: 10/22/18 13:50

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.4	F1	2.0	1.4	mg/L			11/07/18 14:36	1
Fluoride	0.15		0.10	0.032	mg/L			10/31/18 13:20	1
Sulfate	2.2	J	5.0	1.4	mg/L			11/07/18 16:11	1

Client Sample ID: AY25252 MW-9

Lab Sample ID: 400-161261-5

Date Collected: 10/22/18 15:10

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.0		2.0	1.4	mg/L			11/07/18 14:36	1
Fluoride	0.050	J	0.10	0.032	mg/L			10/31/18 13:22	1
Sulfate	5.1		5.0	1.4	mg/L			11/08/18 07:46	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Client Sample ID: AY25253 MW-2

Lab Sample ID: 400-161261-6

Date Collected: 10/22/18 17:08

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.6		2.0	1.4	mg/L			11/07/18 14:36	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 13:26	1
Sulfate	8.3		5.0	1.4	mg/L			11/08/18 07:52	1

Client Sample ID: AY25254 MW-15

Lab Sample ID: 400-161261-7

Date Collected: 10/23/18 09:11

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5	J	2.0	1.4	mg/L			11/08/18 10:49	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 13:29	1
Sulfate	<1.4		5.0	1.4	mg/L			11/08/18 07:59	1

Client Sample ID: AY25255 MW-3

Lab Sample ID: 400-161261-8

Date Collected: 10/23/18 10:50

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		2.0	1.4	mg/L			11/08/18 10:49	1
Fluoride	0.050	J	0.10	0.032	mg/L			10/31/18 13:32	1
Sulfate	12		5.0	1.4	mg/L			11/08/18 07:59	1

Client Sample ID: AY25256 MW-14S

Lab Sample ID: 400-161261-9

Date Collected: 10/23/18 11:56

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.4		2.0	1.4	mg/L			11/08/18 10:49	1
Fluoride	0.070	J	0.10	0.032	mg/L			10/31/18 14:14	1
Sulfate	5.4		5.0	1.4	mg/L			11/08/18 07:59	1

Client Sample ID: AY25257 MW-12

Lab Sample ID: 400-161261-10

Date Collected: 10/23/18 12:53

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1		2.0	1.4	mg/L			11/08/18 10:56	1
Fluoride	0.060	J	0.10	0.032	mg/L			10/31/18 14:22	1
Sulfate	4.8	J	5.0	1.4	mg/L			11/08/18 07:59	1

Client Sample ID: AY25258 MW-13

Lab Sample ID: 400-161261-11

Date Collected: 10/23/18 13:52

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		2.0	1.4	mg/L			11/08/18 10:49	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25258 MW-13

Lab Sample ID: 400-161261-11

Date Collected: 10/23/18 13:52

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.050	J	0.10	0.032	mg/L			10/31/18 14:25	1
Sulfate	6.7		5.0	1.4	mg/L			11/08/18 07:59	1

Client Sample ID: AY25259 MW-1

Lab Sample ID: 400-161261-12

Date Collected: 10/23/18 14:45

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1		2.0	1.4	mg/L			11/08/18 10:49	1
Fluoride	0.39		0.10	0.032	mg/L			10/31/18 14:29	1
Sulfate	3.0	J	5.0	1.4	mg/L			11/08/18 07:59	1

Client Sample ID: AY25260 MW-6 DUP

Lab Sample ID: 400-161261-13

Date Collected: 10/22/18 10:56

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4		2.0	1.4	mg/L			11/07/18 14:43	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 14:31	1
Sulfate	<1.4		5.0	1.4	mg/L			11/08/18 07:52	1

Client Sample ID: AY25261 FB-1

Lab Sample ID: 400-161261-14

Date Collected: 10/22/18 16:40

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.4		2.0	1.4	mg/L			11/07/18 14:43	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 14:34	1
Sulfate	<1.4		5.0	1.4	mg/L			11/08/18 07:52	1

Client Sample ID: AY25262 MW-12 DUP

Lab Sample ID: 400-161261-15

Date Collected: 10/23/18 12:53

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		2.0	1.4	mg/L			11/08/18 10:49	1
Fluoride	0.050	J	0.10	0.032	mg/L			10/31/18 14:37	1
Sulfate	5.0		5.0	1.4	mg/L			11/08/18 08:00	1

Client Sample ID: AY25371 MW-11

Lab Sample ID: 400-161261-16

Date Collected: 10/24/18 11:28

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		2.0	1.4	mg/L			11/08/18 12:41	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 14:39	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25371 MW-11

Lab Sample ID: 400-161261-16

Date Collected: 10/24/18 11:28

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.4	J	5.0	1.4	mg/L			11/08/18 08:57	1

Client Sample ID: AY25372 MW-10

Lab Sample ID: 400-161261-17

Date Collected: 10/24/18 13:05

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.9		2.0	1.4	mg/L			11/08/18 12:44	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 14:49	1
Sulfate	<1.4		5.0	1.4	mg/L			11/08/18 08:57	1

Client Sample ID: AY25373 FB-2

Lab Sample ID: 400-161261-18

Date Collected: 10/24/18 11:50

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.4		2.0	1.4	mg/L			11/08/18 12:41	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 14:56	1
Sulfate	<1.4		5.0	1.4	mg/L			11/08/18 08:57	1

Client Sample ID: AY25374 EB-1

Lab Sample ID: 400-161261-19

Date Collected: 10/24/18 13:40

Matrix: Water

Date Received: 10/29/18 16:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.4		2.0	1.4	mg/L			11/08/18 12:44	1
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 14:59	1
Sulfate	<1.4		5.0	1.4	mg/L			11/08/18 08:57	1

Definitions/Glossary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Client Sample ID: AY25248 MW-5
Date Collected: 10/22/18 09:57
Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418722	11/07/18 14:36	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417824	10/31/18 13:09	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	418748	11/07/18 16:56	RRC	TAL PEN

Client Sample ID: AY25249 MW-6
Date Collected: 10/22/18 10:56
Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418722	11/07/18 14:36	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417824	10/31/18 13:13	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418748	11/07/18 16:10	RRC	TAL PEN

Client Sample ID: AY25250 MW-7
Date Collected: 10/22/18 12:17
Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418722	11/07/18 14:36	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417824	10/31/18 13:17	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418748	11/07/18 16:11	RRC	TAL PEN

Client Sample ID: AY25251 MW-8
Date Collected: 10/22/18 13:50
Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418722	11/07/18 14:36	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417824	10/31/18 13:20	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418748	11/07/18 16:11	RRC	TAL PEN

Client Sample ID: AY25252 MW-9
Date Collected: 10/22/18 15:10
Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418722	11/07/18 14:36	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417824	10/31/18 13:22	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:46	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Client Sample ID: AY25253 MW-2

Lab Sample ID: 400-161261-6

Date Collected: 10/22/18 17:08

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418722	11/07/18 14:36	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417824	10/31/18 13:26	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:52	RRC	TAL PEN

Client Sample ID: AY25254 MW-15

Lab Sample ID: 400-161261-7

Date Collected: 10/23/18 09:11

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418842	11/08/18 10:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417824	10/31/18 13:29	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:59	RRC	TAL PEN

Client Sample ID: AY25255 MW-3

Lab Sample ID: 400-161261-8

Date Collected: 10/23/18 10:50

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418842	11/08/18 10:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417824	10/31/18 13:32	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:59	RRC	TAL PEN

Client Sample ID: AY25256 MW-14S

Lab Sample ID: 400-161261-9

Date Collected: 10/23/18 11:56

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418842	11/08/18 10:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:14	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:59	RRC	TAL PEN

Client Sample ID: AY25257 MW-12

Lab Sample ID: 400-161261-10

Date Collected: 10/23/18 12:53

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418842	11/08/18 10:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:22	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:59	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Client Sample ID: AY25258 MW-13

Lab Sample ID: 400-161261-11

Date Collected: 10/23/18 13:52

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418842	11/08/18 10:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:25	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:59	RRC	TAL PEN

Client Sample ID: AY25259 MW-1

Lab Sample ID: 400-161261-12

Date Collected: 10/23/18 14:45

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418842	11/08/18 10:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:29	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:59	RRC	TAL PEN

Client Sample ID: AY25260 MW-6 DUP

Lab Sample ID: 400-161261-13

Date Collected: 10/22/18 10:56

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418722	11/07/18 14:43	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:31	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:52	RRC	TAL PEN

Client Sample ID: AY25261 FB-1

Lab Sample ID: 400-161261-14

Date Collected: 10/22/18 16:40

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418722	11/07/18 14:43	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:34	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 07:52	RRC	TAL PEN

Client Sample ID: AY25262 MW-12 DUP

Lab Sample ID: 400-161261-15

Date Collected: 10/23/18 12:53

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418842	11/08/18 10:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:37	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418790	11/08/18 08:00	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

Client Sample ID: AY25371 MW-11

Lab Sample ID: 400-161261-16

Date Collected: 10/24/18 11:28

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418863	11/08/18 12:41	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:39	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418806	11/08/18 08:57	RRC	TAL PEN

Client Sample ID: AY25372 MW-10

Lab Sample ID: 400-161261-17

Date Collected: 10/24/18 13:05

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418863	11/08/18 12:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:49	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418806	11/08/18 08:57	RRC	TAL PEN

Client Sample ID: AY25373 FB-2

Lab Sample ID: 400-161261-18

Date Collected: 10/24/18 11:50

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418863	11/08/18 12:41	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:56	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418806	11/08/18 08:57	RRC	TAL PEN

Client Sample ID: AY25374 EB-1

Lab Sample ID: 400-161261-19

Date Collected: 10/24/18 13:40

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	418863	11/08/18 12:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	417842	10/31/18 14:59	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	418806	11/08/18 08:57	RRC	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

General Chemistry

Analysis Batch: 417824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-1	AY25248 MW-5	Total/NA	Water	SM 4500 F C	
400-161261-2	AY25249 MW-6	Total/NA	Water	SM 4500 F C	
400-161261-3	AY25250 MW-7	Total/NA	Water	SM 4500 F C	
400-161261-4	AY25251 MW-8	Total/NA	Water	SM 4500 F C	
400-161261-5	AY25252 MW-9	Total/NA	Water	SM 4500 F C	
400-161261-6	AY25253 MW-2	Total/NA	Water	SM 4500 F C	
400-161261-7	AY25254 MW-15	Total/NA	Water	SM 4500 F C	
400-161261-8	AY25255 MW-3	Total/NA	Water	SM 4500 F C	
MB 400-417824/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-417824/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-160968-B-21 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-160968-B-21 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-160851-A-4 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 417842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-9	AY25256 MW-14S	Total/NA	Water	SM 4500 F C	
400-161261-10	AY25257 MW-12	Total/NA	Water	SM 4500 F C	
400-161261-11	AY25258 MW-13	Total/NA	Water	SM 4500 F C	
400-161261-12	AY25259 MW-1	Total/NA	Water	SM 4500 F C	
400-161261-13	AY25260 MW-6 DUP	Total/NA	Water	SM 4500 F C	
400-161261-14	AY25261 FB-1	Total/NA	Water	SM 4500 F C	
400-161261-15	AY25262 MW-12 DUP	Total/NA	Water	SM 4500 F C	
400-161261-16	AY25371 MW-11	Total/NA	Water	SM 4500 F C	
400-161261-17	AY25372 MW-10	Total/NA	Water	SM 4500 F C	
400-161261-18	AY25373 FB-2	Total/NA	Water	SM 4500 F C	
400-161261-19	AY25374 EB-1	Total/NA	Water	SM 4500 F C	
MB 400-417842/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-417842/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-161261-9 MS	AY25256 MW-14S	Total/NA	Water	SM 4500 F C	
400-161261-9 MSD	AY25256 MW-14S	Total/NA	Water	SM 4500 F C	
400-161261-17 DU	AY25372 MW-10	Total/NA	Water	SM 4500 F C	

Analysis Batch: 418722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-1	AY25248 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-161261-2	AY25249 MW-6	Total/NA	Water	SM 4500 Cl- E	
400-161261-3	AY25250 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-161261-4	AY25251 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-161261-5	AY25252 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-161261-6	AY25253 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-161261-13	AY25260 MW-6 DUP	Total/NA	Water	SM 4500 Cl- E	
400-161261-14	AY25261 FB-1	Total/NA	Water	SM 4500 Cl- E	
MB 400-418722/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-418722/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-418722/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-161261-4 MS	AY25251 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-161261-4 MSD	AY25251 MW-8	Total/NA	Water	SM 4500 Cl- E	

QC Association Summary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

General Chemistry (Continued)

Analysis Batch: 418748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-1	AY25248 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-161261-2	AY25249 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-161261-3	AY25250 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-161261-4	AY25251 MW-8	Total/NA	Water	SM 4500 SO4 E	
MB 400-418748/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-418748/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-418748/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-161135-B-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-161135-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
400-161190-G-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-161190-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 418790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-5	AY25252 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-161261-6	AY25253 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-161261-7	AY25254 MW-15	Total/NA	Water	SM 4500 SO4 E	
400-161261-8	AY25255 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-161261-9	AY25256 MW-14S	Total/NA	Water	SM 4500 SO4 E	
400-161261-10	AY25257 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-161261-11	AY25258 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-161261-12	AY25259 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-161261-13	AY25260 MW-6 DUP	Total/NA	Water	SM 4500 SO4 E	
400-161261-14	AY25261 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-161261-15	AY25262 MW-12 DUP	Total/NA	Water	SM 4500 SO4 E	
MB 400-418790/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-418790/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-418790/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-161261-5 MS	AY25252 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-161261-5 MSD	AY25252 MW-9	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 418806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-16	AY25371 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-161261-17	AY25372 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-161261-18	AY25373 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-161261-19	AY25374 EB-1	Total/NA	Water	SM 4500 SO4 E	
MB 400-418806/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-418806/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-418806/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-161260-F-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-161260-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 418842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-7	AY25254 MW-15	Total/NA	Water	SM 4500 Cl- E	
400-161261-8	AY25255 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-161261-9	AY25256 MW-14S	Total/NA	Water	SM 4500 Cl- E	
400-161261-10	AY25257 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-161261-11	AY25258 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-161261-12	AY25259 MW-1	Total/NA	Water	SM 4500 Cl- E	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-161261-1
SDG: Gaston Gypsum 1176

General Chemistry (Continued)

Analysis Batch: 418842 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-15	AY25262 MW-12 DUP	Total/NA	Water	SM 4500 Cl- E	
MB 400-418842/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-418842/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-418842/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-161261-10 MS	AY25257 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-161261-10 MSD	AY25257 MW-12	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 418863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-16	AY25371 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-161261-17	AY25372 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-161261-18	AY25373 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-161261-19	AY25374 EB-1	Total/NA	Water	SM 4500 Cl- E	
MB 400-418863/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-418863/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-418863/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-161261-17 MS	AY25372 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-161261-17 MSD	AY25372 MW-10	Total/NA	Water	SM 4500 Cl- E	

QC Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-418722/6
Matrix: Water
Analysis Batch: 418722

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.4		2.0	1.4	mg/L			11/07/18 14:33	1

Lab Sample ID: LCS 400-418722/7
Matrix: Water
Analysis Batch: 418722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	33.0		mg/L		110	90 - 110

Lab Sample ID: MRL 400-418722/3
Matrix: Water
Analysis Batch: 418722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.11		mg/L		105	50 - 150

Lab Sample ID: 400-161261-4 MS
Matrix: Water
Analysis Batch: 418722

Client Sample ID: AY25251 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<1.4	F1	10.0	12.6	F1	mg/L		126	73 - 120

Lab Sample ID: 400-161261-4 MSD
Matrix: Water
Analysis Batch: 418722

Client Sample ID: AY25251 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<1.4	F1	10.0	12.3	F1	mg/L		123	73 - 120	2	8

Lab Sample ID: MB 400-418842/6
Matrix: Water
Analysis Batch: 418842

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.4		2.0	1.4	mg/L			11/08/18 10:46	1

Lab Sample ID: LCS 400-418842/7
Matrix: Water
Analysis Batch: 418842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.5		mg/L		105	90 - 110

Lab Sample ID: MRL 400-418842/3
Matrix: Water
Analysis Batch: 418842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.26	J	mg/L		63	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Lab Sample ID: 400-161261-10 MS
Matrix: Water
Analysis Batch: 418842

Client Sample ID: AY25257 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.1		10.0	13.5		mg/L		113	73 - 120

Lab Sample ID: 400-161261-10 MSD
Matrix: Water
Analysis Batch: 418842

Client Sample ID: AY25257 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2.1		10.0	13.4		mg/L		113	73 - 120	0	8

Lab Sample ID: MB 400-418863/6
Matrix: Water
Analysis Batch: 418863

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.4		2.0	1.4	mg/L			11/08/18 12:41	1

Lab Sample ID: LCS 400-418863/7
Matrix: Water
Analysis Batch: 418863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	32.1		mg/L		107	90 - 110

Lab Sample ID: MRL 400-418863/3
Matrix: Water
Analysis Batch: 418863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.43	J	mg/L		72	50 - 150

Lab Sample ID: 400-161261-17 MS
Matrix: Water
Analysis Batch: 418863

Client Sample ID: AY25372 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.9		10.0	14.2		mg/L		113	73 - 120

Lab Sample ID: 400-161261-17 MSD
Matrix: Water
Analysis Batch: 418863

Client Sample ID: AY25372 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2.9		10.0	13.7		mg/L		109	73 - 120	3	8

QC Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-417824/3
Matrix: Water
Analysis Batch: 417824

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 12:10	1

Lab Sample ID: LCS 400-417824/4
Matrix: Water
Analysis Batch: 417824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	4.26		mg/L		107	90 - 110

Lab Sample ID: 400-160968-B-21 MS
Matrix: Water
Analysis Batch: 417824

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	1.10		mg/L		110	75 - 125

Lab Sample ID: 400-160968-B-21 MSD
Matrix: Water
Analysis Batch: 417824

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	1.10		mg/L		110	75 - 125	0	4

Lab Sample ID: 400-160851-A-4 DU
Matrix: Water
Analysis Batch: 417824

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.12		0.130	F5	mg/L		8	4

Lab Sample ID: MB 400-417842/3
Matrix: Water
Analysis Batch: 417842

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			10/31/18 14:00	1

Lab Sample ID: LCS 400-417842/4
Matrix: Water
Analysis Batch: 417842

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	4.26		mg/L		107	90 - 110

Lab Sample ID: 400-161261-9 MS
Matrix: Water
Analysis Batch: 417842

Client Sample ID: AY25256 MW-14S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.070	J	1.00	1.16		mg/L		109	75 - 125

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Lab Sample ID: 400-161261-9 MSD
Matrix: Water
Analysis Batch: 417842

Client Sample ID: AY25256 MW-14S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.070	J	1.00	1.16		mg/L		109	75 - 125	0	4

Lab Sample ID: 400-161261-17 DU
Matrix: Water
Analysis Batch: 417842

Client Sample ID: AY25372 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	<0.032		<0.032		mg/L		NC	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-418748/6
Matrix: Water
Analysis Batch: 418748

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			11/07/18 15:57	1

Lab Sample ID: LCS 400-418748/7
Matrix: Water
Analysis Batch: 418748

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.5		mg/L		97	90 - 110

Lab Sample ID: MRL 400-418748/3
Matrix: Water
Analysis Batch: 418748

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.61	J	mg/L		92	50 - 150

Lab Sample ID: 400-161135-B-1 MS
Matrix: Water
Analysis Batch: 418748

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	72		10.0	71.9	4	mg/L		2	77 - 128

Lab Sample ID: 400-161135-B-1 MSD
Matrix: Water
Analysis Batch: 418748

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	72		10.0	68.4	4	mg/L		-33	77 - 128	5	5

QC Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-161190-G-1 MS

Matrix: Water
Analysis Batch: 418748

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	16		10.0	24.7		mg/L		85	77 - 128

Lab Sample ID: 400-161190-G-1 MSD

Matrix: Water
Analysis Batch: 418748

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	16		10.0	24.6		mg/L		84	77 - 128	1	5

Lab Sample ID: MB 400-418790/6

Matrix: Water
Analysis Batch: 418790

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			11/08/18 07:46	1

Lab Sample ID: LCS 400-418790/7

Matrix: Water
Analysis Batch: 418790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.3		mg/L		95	90 - 110

Lab Sample ID: MRL 400-418790/3

Matrix: Water
Analysis Batch: 418790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.18	J	mg/L		84	50 - 150

Lab Sample ID: 400-161261-5 MS

Matrix: Water
Analysis Batch: 418790

Client Sample ID: AY25252 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.1		10.0	15.8		mg/L		107	77 - 128

Lab Sample ID: 400-161261-5 MSD

Matrix: Water
Analysis Batch: 418790

Client Sample ID: AY25252 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	5.1		10.0	16.6		mg/L		116	77 - 128	5	5

Lab Sample ID: MB 400-418806/6

Matrix: Water
Analysis Batch: 418806

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			11/08/18 08:46	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Lab Sample ID: LCS 400-418806/7
Matrix: Water
Analysis Batch: 418806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.4		mg/L		96	90 - 110

Lab Sample ID: MRL 400-418806/3
Matrix: Water
Analysis Batch: 418806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.11	J	mg/L		82	50 - 150

Lab Sample ID: 400-161260-F-2 MS
Matrix: Water
Analysis Batch: 418806

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.3		10.0	14.0		mg/L		87	77 - 128

Lab Sample ID: 400-161260-F-2 MSD
Matrix: Water
Analysis Batch: 418806

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	5.3		10.0	14.0		mg/L		88	77 - 128	0	5

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

Chain of Custody Record

Client Information
 Sampler: Anthony Goggins
 Client Contact: Laura Midkiff
 Lab PIN: Whitmire, Cheyenne R
 E-Mail: cheyenne.whitmire@testamericainc.com
 Phone: 400-161261 COC
 Tracking Note(s):

Company: Alabama Power General Test Laboratory
 Address: 744 County Rd 87 GSC #8
 City: Calera
 State, Zip: AL 35040
 Phone: 205-664-6197 (Tel)
 Email: lbmidkiff@southernco.com
 Project Name: 40007143
 CCR
 Site: Gaston Gypsum 1176

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Over-sat, or Issue Add)	Preservation Code:	Perform MS/MSD (Yes or No)			Field Filtered Sample (Yes or No)	Total Number of Containers	Special Instructions/Note:
						SM 4500 F C	SM 4500 C E	SM 4500 S O 4 E			
AY25248	10/22/18	09:57	G	Water		X	X	X	X	4	MW-5
AY25249	10/22/18	10:56	G	Water		X	X	X	X	2	MW-6
AY25250	10/22/18	12:17	G	Water		X	X	X	X	2	MW-7
AY25251	10/22/18	13:50	G	Water		X	X	X	X	2	MW-8
AY25252	10/22/18	15:10	G	Water		X	X	X	X	2	MW-9
AY25253	10/22/18	17:08	G	Water		X	X	X	X	2	MW-2
AY25254	10/23/18	09:11	G	Water		X	X	X	X	2	MW-15
AY25255	10/23/18	10:50	G	Water		X	X	X	X	2	MW-3
AY25256	10/23/18	11:56	G	Water		X	X	X	X	2	MW-14S
AY25257	10/23/18	12:53	G	Water		X	X	X	X	2	MW-12
AY25258	10/23/18	13:52	G	Water		X	X	X	X	2	MW-13
AY25259	10/23/18	14:45	G	Water		X	X	X	X	2	MW-1
AY25260	10/22/18	10:56	G	Water		X	X	X	X	2	MW-6 DUP (Duplicate)
AY25261	10/22/18	16:40	G	Water		X	X	X	X	2	FB-1 (Field Blank)
AY25262	10/23/18	12:53	G	Water		X	X	X	X	2	MW-12 DUP (Duplicate)

Analysis Requested

Non-Hazard Flammable Skin Irritant Poison B Unknown Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: Laura Midkiff Date: 10/24/2018 12:00

Relinquished by: Date/Time: Company APC

Relinquished by: Date/Time: Company

Relinquished by: Date/Time: Company

Custody Seals Intact: Yes No Custody Seal No.: 2018-11-76-2016-9-12

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

Special Instructions/OC Requirements:

Method of Shipment: Date/Time: 10/29/18 16:45 Company JPL
 Date/Time: 10/30/18 09:58 Company JPL
 Date/Time: Company

Cooler Temperature(s) and Other Remarks: 20.7°C, 20.6°C



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Chain of Custody Record

Client Information Nick Pitts Laura Mickiff Alabama Power General Test Laboratory 744 County Rd 87 GSC #8 Calera AL, 35040 205-664-6197(Tel) lbmickiff@southernco.com Project Name: CCR Site: Gaston Gypsum 1176		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		SOC No: 400-56525-24537.1 Page: Page 2 of 2 Job #:			
Due Date Requested: TAT Requested (days): Routine PO #: WO #: Project #: 40007143 SSOW#:		Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No SM 4500 F C <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No SM 4500 Cl E <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No SM 4500 SO4 E <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 9315_Ra226,9320_Ra228,9320_Ra228,9320_Ra228,9320_Ra228,9320_Ra228,9320_GFPc					
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (Water, Solid, Other) Preservation Code:		Total Number of Containers Special Instructions/Note:					
AY25371	10/24/18	11:28	G	Water	MW-11	2	
AY25372	10/24/18	13:05	G	Water	MW-10	2	
AY25373	10/24/18	11:50	G	Water	FB-2 (Field Blank)	2	
AY25374	10/24/18	13:40	G	Water	EB-1 (Equipment Blank)	2	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:					
Empty Kit Relinquished by: Relinquished by: Laura Mickiff Relinquished by: Relinquished by:		Date: Date/Time: 10/25/2018 12:00 Date/Time: Date/Time:		Method of Shipment: Received by: [Signature] Received by: [Signature] Received by:		Date/Time: 10/29/18 16:45 Date/Time: 10/30/18 09:38 Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company:	



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-161261-1
SDG Number: Gaston Gypsum 1176

Login Number: 161261

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 21.7°C, 20.6°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-161261-1
 SDG: Gaston Gypsum 1176

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18 *
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA180023	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-161261-2

TestAmerica Sample Delivery Group: Gaston Gypsum 1176

Client Project/Site: CCR Plant Gaston

For:

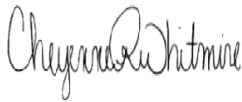
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Laura Midkiff



Authorized for release by:

11/27/2018 11:36:52 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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

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

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

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Case Narrative

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

Job ID: 400-161261-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-161261-2

RAD

Method(s) 9320: Radium-228 Prep Batch 160-398713: The method blank was recounted due to an instrument error (the instrument did not write the initial count to the database). Due to the rapid decay rate of yttrium-90, the MDC elevated above the RL (MDC 1.06 pCi/L). All associated samples have an MDC below the RL. The results are reported with this narrative. AY25248 MW-5 (400-161261-1), AY25248 MW-5 (400-161261-1[DUJ]), AY25249 MW-6 (400-161261-2), AY25250 MW-7 (400-161261-3), AY25251 MW-8 (400-161261-4), AY25252 MW-9 (400-161261-5), AY25253 MW-2 (400-161261-6), AY25254 MW-15 (400-161261-7), AY25255 MW-3 (400-161261-8), AY25256 MW-14S (400-161261-9), AY25257 MW-12 (400-161261-10), AY25258 MW-13 (400-161261-11), AY25259 MW-1 (400-161261-12), AY25260 MW-6 DUP (400-161261-13), AY25261 FB-1 (400-161261-14), AY25262 MW-12 DUP (400-161261-15), AY25371 MW-11 (400-161261-16), AY25372 MW-10 (400-161261-17), AY25373 FB-2 (400-161261-18), AY25374 EB-1 (400-161261-19), (LCS 160-398713/1-A) and (MB 160-398713/22-A)

Method(s) PrecSep_0: Radium 228 Prep Batch 160-398713: The following samples were prepared at a reduced aliquot due to limited sample volume. AY25248 MW-5 (400-161261-1), AY25248 MW-5 (400-161261-1[DUJ]), AY25249 MW-6 (400-161261-2), AY25250 MW-7 (400-161261-3), AY25251 MW-8 (400-161261-4), AY25252 MW-9 (400-161261-5), AY25253 MW-2 (400-161261-6), AY25254 MW-15 (400-161261-7), AY25255 MW-3 (400-161261-8), AY25256 MW-14S (400-161261-9), AY25257 MW-12 (400-161261-10), AY25258 MW-13 (400-161261-11), AY25259 MW-1 (400-161261-12), AY25260 MW-6 DUP (400-161261-13), AY25261 FB-1 (400-161261-14), AY25262 MW-12 DUP (400-161261-15), AY25371 MW-11 (400-161261-16), AY25372 MW-10 (400-161261-17), AY25373 FB-2 (400-161261-18) and AY25374 EB-1 (400-161261-19)

Method(s) PrecSep-21: Radium 226 Prep Batch 160-398705: The following samples were prepared at a reduced aliquot due to limited sample volume. AY25248 MW-5 (400-161261-1), AY25248 MW-5 (400-161261-1[DUJ]), AY25249 MW-6 (400-161261-2), AY25250 MW-7 (400-161261-3), AY25251 MW-8 (400-161261-4), AY25252 MW-9 (400-161261-5), AY25253 MW-2 (400-161261-6), AY25254 MW-15 (400-161261-7), AY25255 MW-3 (400-161261-8), AY25256 MW-14S (400-161261-9), AY25257 MW-12 (400-161261-10), AY25258 MW-13 (400-161261-11), AY25259 MW-1 (400-161261-12), AY25260 MW-6 DUP (400-161261-13), AY25261 FB-1 (400-161261-14), AY25262 MW-12 DUP (400-161261-15), AY25371 MW-11 (400-161261-16), AY25372 MW-10 (400-161261-17), AY25373 FB-2 (400-161261-18) and AY25374 EB-1 (400-161261-19)

Method Summary

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

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

Protocol References:

None = None

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

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

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-161261-1	AY25248 MW-5	Water	10/22/18 09:57	10/29/18 16:45
400-161261-2	AY25249 MW-6	Water	10/22/18 10:56	10/29/18 16:45
400-161261-3	AY25250 MW-7	Water	10/22/18 12:17	10/29/18 16:45
400-161261-4	AY25251 MW-8	Water	10/22/18 13:50	10/29/18 16:45
400-161261-5	AY25252 MW-9	Water	10/22/18 15:10	10/29/18 16:45
400-161261-6	AY25253 MW-2	Water	10/22/18 17:08	10/29/18 16:45
400-161261-7	AY25254 MW-15	Water	10/23/18 09:11	10/29/18 16:45
400-161261-8	AY25255 MW-3	Water	10/23/18 10:50	10/29/18 16:45
400-161261-9	AY25256 MW-14S	Water	10/23/18 11:56	10/29/18 16:45
400-161261-10	AY25257 MW-12	Water	10/23/18 12:53	10/29/18 16:45
400-161261-11	AY25258 MW-13	Water	10/23/18 13:52	10/29/18 16:45
400-161261-12	AY25259 MW-1	Water	10/23/18 14:45	10/29/18 16:45
400-161261-13	AY25260 MW-6 DUP	Water	10/22/18 10:56	10/29/18 16:45
400-161261-14	AY25261 FB-1	Water	10/22/18 16:40	10/29/18 16:45
400-161261-15	AY25262 MW-12 DUP	Water	10/23/18 12:53	10/29/18 16:45
400-161261-16	AY25371 MW-11	Water	10/24/18 11:28	10/29/18 16:45
400-161261-17	AY25372 MW-10	Water	10/24/18 13:05	10/29/18 16:45
400-161261-18	AY25373 FB-2	Water	10/24/18 11:50	10/29/18 16:45
400-161261-19	AY25374 EB-1	Water	10/24/18 13:40	10/29/18 16:45

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25248 MW-5

Lab Sample ID: 400-161261-1

Date Collected: 10/22/18 09:57

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.479		0.159	0.164	1.00	0.135	pCi/L	11/01/18 09:24	11/24/18 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					11/01/18 09:24	11/24/18 13:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.682		0.340	0.345	1.00	0.493	pCi/L	11/01/18 09:53	11/19/18 09:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					11/01/18 09:53	11/19/18 09:55	1
Y Carrier	77.8		40 - 110					11/01/18 09:53	11/19/18 09:55	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.16		0.375	0.382	5.00	0.493	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25249 MW-6

Lab Sample ID: 400-161261-2

Date Collected: 10/22/18 10:56

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.374		0.142	0.146	1.00	0.135	pCi/L	11/01/18 09:24	11/24/18 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		40 - 110					11/01/18 09:24	11/24/18 13:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.693		0.389	0.394	1.00	0.584	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	70.7		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.07		0.414	0.420	5.00	0.584	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25250 MW-7

Lab Sample ID: 400-161261-3

Date Collected: 10/22/18 12:17

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.303		0.124	0.127	1.00	0.112	pCi/L	11/01/18 09:24	11/24/18 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					11/01/18 09:24	11/24/18 13:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.731		0.353	0.360	1.00	0.516	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	75.5		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.03		0.374	0.382	5.00	0.516	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25251 MW-8

Lab Sample ID: 400-161261-4

Date Collected: 10/22/18 13:50

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.327		0.144	0.147	1.00	0.157	pCi/L	11/01/18 09:24	11/24/18 12:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					11/01/18 09:24	11/24/18 12:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.421	U	0.286	0.288	1.00	0.439	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	80.4		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.748		0.320	0.323	5.00	0.439	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25252 MW-9

Lab Sample ID: 400-161261-5

Date Collected: 10/22/18 15:10

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.260		0.135	0.137	1.00	0.162	pCi/L	11/01/18 09:24	11/24/18 12:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:24	11/24/18 12:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0504	U	0.220	0.220	1.00	0.414	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	82.2		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.210	U	0.258	0.259	5.00	0.414	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25253 MW-2

Lab Sample ID: 400-161261-6

Date Collected: 10/22/18 17:08

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.396		0.157	0.161	1.00	0.153	pCi/L	11/01/18 09:24	11/24/18 12:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					11/01/18 09:24	11/24/18 12:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0448	U	0.235	0.235	1.00	0.435	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	84.5		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.351	U	0.283	0.285	5.00	0.435	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25254 MW-15

Lab Sample ID: 400-161261-7

Date Collected: 10/23/18 09:11

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.542		0.192	0.198	1.00	0.185	pCi/L	11/01/18 09:24	11/24/18 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		40 - 110					11/01/18 09:24	11/24/18 12:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.287	U	0.340	0.341	1.00	0.562	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	83.4		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.829		0.390	0.394	5.00	0.562	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25255 MW-3

Lab Sample ID: 400-161261-8

Date Collected: 10/23/18 10:50

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.542		0.169	0.176	1.00	0.130	pCi/L	11/01/18 09:24	11/24/18 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					11/01/18 09:24	11/24/18 12:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.338	U	0.248	0.250	1.00	0.383	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	81.9		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.879		0.300	0.306	5.00	0.383	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25256 MW-14S

Lab Sample ID: 400-161261-9

Date Collected: 10/23/18 11:56

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.280		0.136	0.138	1.00	0.156	pCi/L	11/01/18 09:24	11/24/18 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					11/01/18 09:24	11/24/18 12:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0326	U	0.269	0.269	1.00	0.492	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	76.3		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.248	U	0.301	0.302	5.00	0.492	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25257 MW-12

Lab Sample ID: 400-161261-10

Date Collected: 10/23/18 12:53

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.226		0.120	0.122	1.00	0.138	pCi/L	11/01/18 09:24	11/24/18 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					11/01/18 09:24	11/24/18 12:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.497		0.308	0.312	1.00	0.465	pCi/L	11/01/18 09:53	11/19/18 09:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					11/01/18 09:53	11/19/18 09:56	1
Y Carrier	77.0		40 - 110					11/01/18 09:53	11/19/18 09:56	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.723		0.331	0.335	5.00	0.465	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25258 MW-13

Lab Sample ID: 400-161261-11

Date Collected: 10/23/18 13:52

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.804		0.198	0.211	1.00	0.119	pCi/L	11/01/18 09:24	11/24/18 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:24	11/24/18 12:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.233	U	0.279	0.280	1.00	0.461	pCi/L	11/01/18 09:53	11/19/18 09:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:53	11/19/18 09:57	1
Y Carrier	80.0		40 - 110					11/01/18 09:53	11/19/18 09:57	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.04		0.342	0.351	5.00	0.461	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25259 MW-1

Lab Sample ID: 400-161261-12

Date Collected: 10/23/18 14:45

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.350		0.152	0.155	1.00	0.172	pCi/L	11/01/18 09:24	11/24/18 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:24	11/24/18 12:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.790		0.312	0.321	1.00	0.422	pCi/L	11/01/18 09:53	11/19/18 09:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:53	11/19/18 09:57	1
Y Carrier	78.5		40 - 110					11/01/18 09:53	11/19/18 09:57	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.14		0.347	0.356	5.00	0.422	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25260 MW-6 DUP

Lab Sample ID: 400-161261-13

Date Collected: 10/22/18 10:56

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.01		0.235	0.252	1.00	0.175	pCi/L	11/01/18 09:24	11/24/18 12:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					11/01/18 09:24	11/24/18 12:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.616		0.312	0.317	1.00	0.453	pCi/L	11/01/18 09:53	11/19/18 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					11/01/18 09:53	11/19/18 09:58	1
Y Carrier	79.3		40 - 110					11/01/18 09:53	11/19/18 09:58	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.63		0.391	0.405	5.00	0.453	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25261 FB-1

Lab Sample ID: 400-161261-14

Date Collected: 10/22/18 16:40

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.217		0.112	0.113	1.00	0.126	pCi/L	11/01/18 09:24	11/24/18 15:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:24	11/24/18 15:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.414	U	0.332	0.334	1.00	0.526	pCi/L	11/01/18 09:53	11/19/18 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:53	11/19/18 09:58	1
Y Carrier	75.5		40 - 110					11/01/18 09:53	11/19/18 09:58	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.630		0.350	0.353	5.00	0.526	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25262 MW-12 DUP

Lab Sample ID: 400-161261-15

Date Collected: 10/23/18 12:53

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.202		0.108	0.110	1.00	0.125	pCi/L	11/01/18 09:24	11/24/18 15:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:24	11/24/18 15:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.290	U	0.320	0.321	1.00	0.525	pCi/L	11/01/18 09:53	11/19/18 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					11/01/18 09:53	11/19/18 09:58	1
Y Carrier	74.0		40 - 110					11/01/18 09:53	11/19/18 09:58	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.492	U	0.338	0.339	5.00	0.525	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25371 MW-11

Lab Sample ID: 400-161261-16

Date Collected: 10/24/18 11:28

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.328		0.128	0.131	1.00	0.118	pCi/L	11/01/18 09:24	11/24/18 15:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					11/01/18 09:24	11/24/18 15:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.571		0.315	0.319	1.00	0.466	pCi/L	11/01/18 09:53	11/19/18 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					11/01/18 09:53	11/19/18 09:58	1
Y Carrier	77.0		40 - 110					11/01/18 09:53	11/19/18 09:58	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.898		0.340	0.345	5.00	0.466	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25372 MW-10

Lab Sample ID: 400-161261-17

Date Collected: 10/24/18 13:05

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.445		0.151	0.156	1.00	0.133	pCi/L	11/01/18 09:24	11/24/18 15:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					11/01/18 09:24	11/24/18 15:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.953		0.429	0.438	1.00	0.634	pCi/L	11/01/18 09:53	11/19/18 10:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					11/01/18 09:53	11/19/18 10:01	1
Y Carrier	80.0		40 - 110					11/01/18 09:53	11/19/18 10:01	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.40		0.455	0.465	5.00	0.634	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25373 FB-2

Lab Sample ID: 400-161261-18

Date Collected: 10/24/18 11:50

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.233		0.113	0.115	1.00	0.120	pCi/L	11/01/18 09:24	11/24/18 15:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					11/01/18 09:24	11/24/18 15:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.849		0.379	0.387	1.00	0.550	pCi/L	11/01/18 09:53	11/19/18 10:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					11/01/18 09:53	11/19/18 10:01	1
Y Carrier	78.9		40 - 110					11/01/18 09:53	11/19/18 10:01	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.08		0.395	0.404	5.00	0.550	pCi/L		11/26/18 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25374 EB-1

Lab Sample ID: 400-161261-19

Date Collected: 10/24/18 13:40

Matrix: Water

Date Received: 10/29/18 16:45

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.326		0.127	0.130	1.00	0.111	pCi/L	11/01/18 09:24	11/24/18 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					11/01/18 09:24	11/24/18 15:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.744		0.394	0.400	1.00	0.593	pCi/L	11/01/18 09:53	11/19/18 10:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					11/01/18 09:53	11/19/18 10:01	1
Y Carrier	77.0		40 - 110					11/01/18 09:53	11/19/18 10:01	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.07		0.414	0.421	5.00	0.593	pCi/L		11/26/18 15:24	1

Definitions/Glossary

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

Qualifiers

Rad

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

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

Client Sample ID: AY25248 MW-5

Date Collected: 10/22/18 09:57

Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402361	11/24/18 13:11	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:55	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25249 MW-6

Date Collected: 10/22/18 10:56

Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402361	11/24/18 13:11	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25250 MW-7

Date Collected: 10/22/18 12:17

Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402361	11/24/18 13:11	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25251 MW-8

Date Collected: 10/22/18 13:50

Date Received: 10/29/18 16:45

Lab Sample ID: 400-161261-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:58	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

Client Sample ID: AY25252 MW-9

Lab Sample ID: 400-161261-5

Date Collected: 10/22/18 15:10

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:58	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25253 MW-2

Lab Sample ID: 400-161261-6

Date Collected: 10/22/18 17:08

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:58	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25254 MW-15

Lab Sample ID: 400-161261-7

Date Collected: 10/23/18 09:11

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:59	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25255 MW-3

Lab Sample ID: 400-161261-8

Date Collected: 10/23/18 10:50

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:59	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

Client Sample ID: AY25256 MW-14S

Lab Sample ID: 400-161261-9

Date Collected: 10/23/18 11:56

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:59	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25257 MW-12

Lab Sample ID: 400-161261-10

Date Collected: 10/23/18 12:53

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:59	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401643	11/19/18 09:56	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25258 MW-13

Lab Sample ID: 400-161261-11

Date Collected: 10/23/18 13:52

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:59	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401596	11/19/18 09:57	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25259 MW-1

Lab Sample ID: 400-161261-12

Date Collected: 10/23/18 14:45

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:59	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401596	11/19/18 09:57	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

Client Sample ID: AY25260 MW-6 DUP

Lab Sample ID: 400-161261-13

Date Collected: 10/22/18 10:56

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402365	11/24/18 12:59	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401596	11/19/18 09:58	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25261 FB-1

Lab Sample ID: 400-161261-14

Date Collected: 10/22/18 16:40

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402364	11/24/18 15:03	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401596	11/19/18 09:58	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25262 MW-12 DUP

Lab Sample ID: 400-161261-15

Date Collected: 10/23/18 12:53

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402364	11/24/18 15:03	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401596	11/19/18 09:58	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25371 MW-11

Lab Sample ID: 400-161261-16

Date Collected: 10/24/18 11:28

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402364	11/24/18 15:03	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401596	11/19/18 09:58	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Client Sample ID: AY25372 MW-10

Lab Sample ID: 400-161261-17

Date Collected: 10/24/18 13:05

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402364	11/24/18 15:03	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401654	11/19/18 10:01	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25373 FB-2

Lab Sample ID: 400-161261-18

Date Collected: 10/24/18 11:50

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402364	11/24/18 15:03	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401654	11/19/18 10:01	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Client Sample ID: AY25374 EB-1

Lab Sample ID: 400-161261-19

Date Collected: 10/24/18 13:40

Matrix: Water

Date Received: 10/29/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			398705	11/01/18 09:24	JLC	TAL SL
Total/NA	Analysis	9315		1	402364	11/24/18 15:04	CDR	TAL SL
Total/NA	Prep	PrecSep_0			398713	11/01/18 09:53	JLC	TAL SL
Total/NA	Analysis	9320		1	401654	11/19/18 10:01	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	402686	11/26/18 15:24	RTM	TAL SL

Laboratory References:

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

QC Association Summary

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Rad

Prep Batch: 398705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-1	AY25248 MW-5	Total/NA	Water	PrecSep-21	
400-161261-2	AY25249 MW-6	Total/NA	Water	PrecSep-21	
400-161261-3	AY25250 MW-7	Total/NA	Water	PrecSep-21	
400-161261-4	AY25251 MW-8	Total/NA	Water	PrecSep-21	
400-161261-5	AY25252 MW-9	Total/NA	Water	PrecSep-21	
400-161261-6	AY25253 MW-2	Total/NA	Water	PrecSep-21	
400-161261-7	AY25254 MW-15	Total/NA	Water	PrecSep-21	
400-161261-8	AY25255 MW-3	Total/NA	Water	PrecSep-21	
400-161261-9	AY25256 MW-14S	Total/NA	Water	PrecSep-21	
400-161261-10	AY25257 MW-12	Total/NA	Water	PrecSep-21	
400-161261-11	AY25258 MW-13	Total/NA	Water	PrecSep-21	
400-161261-12	AY25259 MW-1	Total/NA	Water	PrecSep-21	
400-161261-13	AY25260 MW-6 DUP	Total/NA	Water	PrecSep-21	
400-161261-14	AY25261 FB-1	Total/NA	Water	PrecSep-21	
400-161261-15	AY25262 MW-12 DUP	Total/NA	Water	PrecSep-21	
400-161261-16	AY25371 MW-11	Total/NA	Water	PrecSep-21	
400-161261-17	AY25372 MW-10	Total/NA	Water	PrecSep-21	
400-161261-18	AY25373 FB-2	Total/NA	Water	PrecSep-21	
400-161261-19	AY25374 EB-1	Total/NA	Water	PrecSep-21	
MB 160-398705/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-398705/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-161261-1 DU	AY25248 MW-5	Total/NA	Water	PrecSep-21	

Prep Batch: 398713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161261-1	AY25248 MW-5	Total/NA	Water	PrecSep_0	
400-161261-2	AY25249 MW-6	Total/NA	Water	PrecSep_0	
400-161261-3	AY25250 MW-7	Total/NA	Water	PrecSep_0	
400-161261-4	AY25251 MW-8	Total/NA	Water	PrecSep_0	
400-161261-5	AY25252 MW-9	Total/NA	Water	PrecSep_0	
400-161261-6	AY25253 MW-2	Total/NA	Water	PrecSep_0	
400-161261-7	AY25254 MW-15	Total/NA	Water	PrecSep_0	
400-161261-8	AY25255 MW-3	Total/NA	Water	PrecSep_0	
400-161261-9	AY25256 MW-14S	Total/NA	Water	PrecSep_0	
400-161261-10	AY25257 MW-12	Total/NA	Water	PrecSep_0	
400-161261-11	AY25258 MW-13	Total/NA	Water	PrecSep_0	
400-161261-12	AY25259 MW-1	Total/NA	Water	PrecSep_0	
400-161261-13	AY25260 MW-6 DUP	Total/NA	Water	PrecSep_0	
400-161261-14	AY25261 FB-1	Total/NA	Water	PrecSep_0	
400-161261-15	AY25262 MW-12 DUP	Total/NA	Water	PrecSep_0	
400-161261-16	AY25371 MW-11	Total/NA	Water	PrecSep_0	
400-161261-17	AY25372 MW-10	Total/NA	Water	PrecSep_0	
400-161261-18	AY25373 FB-2	Total/NA	Water	PrecSep_0	
400-161261-19	AY25374 EB-1	Total/NA	Water	PrecSep_0	
MB 160-398713/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-398713/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-161261-1 DU	AY25248 MW-5	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-398705/22-A
Matrix: Water
Analysis Batch: 402364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398705

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.3398		0.128	0.132	1.00	0.115	pCi/L	11/01/18 09:24	11/24/18 15:04	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					11/01/18 09:24	11/24/18 15:04	1

Lab Sample ID: LCS 160-398705/1-A
Matrix: Water
Analysis Batch: 402361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398705

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	15.1	14.94		1.56	1.00	0.122	pCi/L	99	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	100		40 - 110						

Lab Sample ID: 400-161261-1 DU
Matrix: Water
Analysis Batch: 402361

Client Sample ID: AY25248 MW-5
Prep Type: Total/NA
Prep Batch: 398705

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.479		0.4490		0.157	1.00	0.138	pCi/L	0.09	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	103		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-398713/22-A
Matrix: Water
Analysis Batch: 401582

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398713

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4010	U G	0.631	0.632	1.00	1.06	pCi/L	11/01/18 09:53	11/19/18 14:41	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					11/01/18 09:53	11/19/18 14:41	1
Y Carrier	77.0		40 - 110					11/01/18 09:53	11/19/18 14:41	1

QC Sample Results

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

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

Lab Sample ID: LCS 160-398713/1-A
Matrix: Water
Analysis Batch: 401643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398713

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	12.3	11.99		1.39	1.00	0.488	pCi/L	98	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	100		40 - 110
Y Carrier	81.1		40 - 110

Lab Sample ID: 400-161261-1 DU
Matrix: Water
Analysis Batch: 401643

Client Sample ID: AY25248 MW-5
Prep Type: Total/NA
Prep Batch: 398713

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.682		0.3005	U	0.278	1.00	0.444	pCi/L	0.61	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	103		40 - 110
Y Carrier	80.4		40 - 110

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Lab Sample ID: 400-161261-1 DU
Matrix: Water
Analysis Batch: 402686

Client Sample ID: AY25248 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	1.16		0.7495		0.319	5.00	0.444	pCi/L	0.59	

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

Chain of Custody Record

Client Information
 Sampler: Anthony Goggins
 Client Contact: Laura Midkiff
 Lab PIN: Whitmire, Cheyenne R
 E-Mail: cheyenne.whitmire@testamericainc.com
 Phone: 400-161261 COC
 Tracking Note(s):

Company: Alabama Power General Test Laboratory
 Address: 744 County Rd 87 GSC #8
 City: Calera
 State, Zip: AL 35040
 Phone: 205-664-6197 (Tel)
 Email: lbmidkiff@southernco.com
 Project Name: 40007143
 CCR
 Site: Gaston Gypsum 1176



Analysis Requested
 Preservation Codes:
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2SO3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - ph 4-5
 X - EDTA
 Y - EDA
 Z - other (specify)
 Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Over-sat, or Issue Add)	Perform MS/MSD (Yes or No)			Field Filtered Sample (Yes or No)			Total Number of Containers	Special Instructions/Note:
					SM 4500 F C	SM 4500 C E	SM 4500 S O 4 E	N	N	D		
AY25248	10/22/18	09:57	G	Water	X	X	X	X	X	X	4	MW-5
AY25249	10/22/18	10:56	G	Water	X	X	X	X	X	X	2	MW-6
AY25250	10/22/18	12:17	G	Water	X	X	X	X	X	X	2	MW-7
AY25251	10/22/18	13:50	G	Water	X	X	X	X	X	X	2	MW-8
AY25252	10/22/18	15:10	G	Water	X	X	X	X	X	X	2	MW-9
AY25253	10/22/18	17:08	G	Water	X	X	X	X	X	X	2	MW-2
AY25254	10/23/18	09:11	G	Water	X	X	X	X	X	X	2	MW-15
AY25255	10/23/18	10:50	G	Water	X	X	X	X	X	X	2	MW-3
AY25256	10/23/18	11:56	G	Water	X	X	X	X	X	X	2	MW-14S
AY25257	10/23/18	12:53	G	Water	X	X	X	X	X	X	2	MW-12
AY25258	10/23/18	13:52	G	Water	X	X	X	X	X	X	2	MW-13
AY25259	10/23/18	14:45	G	Water	X	X	X	X	X	X	2	MW-1
AY25260	10/22/18	10:56	G	Water	X	X	X	X	X	X	2	MW-6 DUP (Duplicate)
AY25261	10/22/18	16:40	G	Water	X	X	X	X	X	X	2	FB-1 (Field Blank)
AY25262	10/23/18	12:53	G	Water	X	X	X	X	X	X	2	MW-12 DUP (Duplicate)

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

Empty Kit Relinquished by: Laura Midkiff
 Relinquished by: _____
 Relinquished by: _____
 Relinquished by: _____

Custody Seals Intact:
 Δ Yes Δ No

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

Special Instructions/OC Requirements:

Relinquished by: Laura Midkiff
 Date/Time: 10/24/2018 12:00
 Company: APC

Received by: _____
 Date/Time: 10/29/18 16:45
 Company: _____

Received by: _____
 Date/Time: 10/30/18 09:58
 Company: _____

Received by: _____
 Date/Time: _____
 Company: _____

Cooler Temperature(s) and Other Remarks:
 20.7 C, 20.1 C, 20.6 C



Chain of Custody Record

Client Information Nick Pitts Laura Mickiff Alabama Power General Test Laboratory 744 County Rd 87 GSC #8 Calera AL, 35040 205-664-6197(Tel) lbmickiff@southernco.com Project Name: CCR Site: Gaston Gypsum 1176		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		SOC No: 400-56525-24537.1 Page: Page 2 of 2 Job #:									
Due Date Requested: TAT Requested (days): Routine PO #: WO #: Project #: 40007143 SSO#:		Analysis Requested											
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Air, Soil, Inorganic, Acid)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F.C	SM 4500 C.E	SM 4500 SO4.E	9315, Ra226, 9320, Ra228, Ra228R, Ra228, G.F.P.C	Total Number of Containers	Special Instructions/Note:
AY25371	10/24/18	11:28	G	Water		X	X	X	X	X		2	MW-11
AY25372	10/24/18	13:05	G	Water		X	X	X	X	X		2	MW-10
AY25373	10/24/18	11:50	G	Water		X	X	X	X	X		2	FB-2 (Field Blank)
AY25374	10/24/18	13:40	G	Water		X	X	X	X	X		2	EB-1 (Equipment Blank)
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHCO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AshNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 L - EDA Z - other (specify)													
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)													
Empty Kit Relinquished by: Relinquished by: Laura Mickiff Relinquished by: Relinquished by:													
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:													
Date: 10/25/2018 12:00 Date/Time: 10/25/2018 12:00 Date/Time: Date/Time:													
Method of Shipment: Received by: [Signature] Received by: [Signature] Received by: [Signature]													
Custody Seals Intact: Δ Yes Δ No Custody Seal No.:													
Cooler Temperature(s) °C and Other Remarks:													



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-161261-2
SDG Number: Gaston Gypsum 1176

Login Number: 161261

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 21.7°C, 20.6°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-161261-2
SDG Number: Gaston Gypsum 1176

Login Number: 161261
List Number: 2
Creator: Hellm, Michael

List Source: TestAmerica St. Louis
List Creation: 10/31/18 01:07 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	18.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-161261-2
 SDG: Gaston Gypsum 1176

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18 *
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA180023	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-19
ANAB	DoD ELAP		L2305	04-06-19
Arizona	State Program	9	AZ0813	12-08-18 *
California	State Program	9	2886	06-30-19
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-19
Illinois	NELAP	5	200023	11-30-18 *
Iowa	State Program	7	373	12-01-18 *
Kansas	NELAP	7	E-10236	10-31-18 *
Kentucky (DW)	State Program	4	90125	12-31-18
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA180017	12-31-18 *
Maryland	State Program	3	310	09-30-19
Michigan	State Program	5	9005	06-30-18 *
Missouri	State Program	7	780	06-30-19
Nevada	State Program	9	MO000542018-1	07-31-19

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-161261-2
SDG: Gaston Gypsum 1176

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	MO002	06-30-19
New York	NELAP	2	11616	03-31-19
North Dakota	State Program	8	R207	06-30-19
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-19
Pennsylvania	NELAP	3	68-00540	02-28-19
South Carolina	State Program	4	85002001	06-30-19
Texas	NELAP	6	T104704193-18-12	07-31-19
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542018-10	07-31-19
Virginia	NELAP	3	460230	06-14-19
Washington	State Program	10	C592	08-30-19
West Virginia DEP	State Program	3	381	08-31-19

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-1	10/23/2018 14:16	332.8	uS/cm	Conductivity
GN-GSA-MW-1	10/23/2018 14:16	33.9	ft	Depth to Water Detail
GN-GSA-MW-1	10/23/2018 14:16	0.35	mg/L	DO
GN-GSA-MW-1	10/23/2018 14:16	-158.6	mv	Oxidation Reduction Potential
GN-GSA-MW-1	10/23/2018 14:16	7.61	pH	pH
GN-GSA-MW-1	10/23/2018 14:16	20.67	C	Temperature
GN-GSA-MW-1	10/23/2018 14:16	2.32	NTU	Turbidity
GN-GSA-MW-1	10/23/2018 14:21	330.7	uS/cm	Conductivity
GN-GSA-MW-1	10/23/2018 14:21	34.19	ft	Depth to Water Detail
GN-GSA-MW-1	10/23/2018 14:21	0.15	mg/L	DO
GN-GSA-MW-1	10/23/2018 14:21	-173.4	mv	Oxidation Reduction Potential
GN-GSA-MW-1	10/23/2018 14:21	7.6	pH	pH
GN-GSA-MW-1	10/23/2018 14:21	20.32	C	Temperature
GN-GSA-MW-1	10/23/2018 14:21	1.39	NTU	Turbidity
GN-GSA-MW-1	10/23/2018 14:26	330.8	uS/cm	Conductivity
GN-GSA-MW-1	10/23/2018 14:26	34.37	ft	Depth to Water Detail
GN-GSA-MW-1	10/23/2018 14:26	0.12	mg/L	DO
GN-GSA-MW-1	10/23/2018 14:26	-177.9	mv	Oxidation Reduction Potential
GN-GSA-MW-1	10/23/2018 14:26	7.62	pH	pH
GN-GSA-MW-1	10/23/2018 14:26	20.25	C	Temperature
GN-GSA-MW-1	10/23/2018 14:26	0.94	NTU	Turbidity
GN-GSA-MW-1	10/23/2018 14:31	333.7	uS/cm	Conductivity
GN-GSA-MW-1	10/23/2018 14:31	34.55	ft	Depth to Water Detail
GN-GSA-MW-1	10/23/2018 14:31	0.1	mg/L	DO
GN-GSA-MW-1	10/23/2018 14:31	-175.4	mv	Oxidation Reduction Potential
GN-GSA-MW-1	10/23/2018 14:31	7.64	pH	pH
GN-GSA-MW-1	10/23/2018 14:31	20.22	C	Temperature
GN-GSA-MW-1	10/23/2018 14:31	1.08	NTU	Turbidity
GN-GSA-MW-1	10/23/2018 14:36	336.4	uS/cm	Conductivity
GN-GSA-MW-1	10/23/2018 14:36	34.68	ft	Depth to Water Detail
GN-GSA-MW-1	10/23/2018 14:36	0.1	mg/L	DO
GN-GSA-MW-1	10/23/2018 14:36	-170.8	mv	Oxidation Reduction Potential
GN-GSA-MW-1	10/23/2018 14:36	7.65	pH	pH
GN-GSA-MW-1	10/23/2018 14:36	20.17	C	Temperature
GN-GSA-MW-1	10/23/2018 14:36	1.45	NTU	Turbidity
GN-GSA-MW-1	10/23/2018 14:42	338.3	uS/cm	Conductivity
GN-GSA-MW-1	10/23/2018 14:42	34.77	ft	Depth to Water Detail
GN-GSA-MW-1	10/23/2018 14:42	0.09	mg/L	DO
GN-GSA-MW-1	10/23/2018 14:42	-166	mv	Oxidation Reduction Potential
GN-GSA-MW-1	10/23/2018 14:42	7.65	pH	pH
GN-GSA-MW-1	10/23/2018 14:42	20.08	C	Temperature
GN-GSA-MW-1	10/23/2018 14:42	1.28	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-2	10/22/2018 16:37	564.4	uS/cm	Conductivity
GN-GSA-MW-2	10/22/2018 16:37	24.62	ft	Depth to Water Detail
GN-GSA-MW-2	10/22/2018 16:37	1.2	mg/L	DO
GN-GSA-MW-2	10/22/2018 16:37	-107.5	mv	Oxidation Reduction Potential
GN-GSA-MW-2	10/22/2018 16:37	7.07	pH	pH
GN-GSA-MW-2	10/22/2018 16:37	21.2	C	Temperature
GN-GSA-MW-2	10/22/2018 16:37	1.44	NTU	Turbidity
GN-GSA-MW-2	10/22/2018 16:42	559.6	uS/cm	Conductivity
GN-GSA-MW-2	10/22/2018 16:42	24.84	ft	Depth to Water Detail
GN-GSA-MW-2	10/22/2018 16:42	1.71	mg/L	DO
GN-GSA-MW-2	10/22/2018 16:42	-72	mv	Oxidation Reduction Potential
GN-GSA-MW-2	10/22/2018 16:42	7.06	pH	pH
GN-GSA-MW-2	10/22/2018 16:42	20.9	C	Temperature
GN-GSA-MW-2	10/22/2018 16:42	1.2	NTU	Turbidity
GN-GSA-MW-2	10/22/2018 16:47	555.2	uS/cm	Conductivity
GN-GSA-MW-2	10/22/2018 16:47	24.89	ft	Depth to Water Detail
GN-GSA-MW-2	10/22/2018 16:47	1.94	mg/L	DO
GN-GSA-MW-2	10/22/2018 16:47	-45	mv	Oxidation Reduction Potential
GN-GSA-MW-2	10/22/2018 16:47	7.06	pH	pH
GN-GSA-MW-2	10/22/2018 16:47	20.73	C	Temperature
GN-GSA-MW-2	10/22/2018 16:47	1.11	NTU	Turbidity
GN-GSA-MW-2	10/22/2018 16:52	556.7	uS/cm	Conductivity
GN-GSA-MW-2	10/22/2018 16:52	25.12	ft	Depth to Water Detail
GN-GSA-MW-2	10/22/2018 16:52	1.93	mg/L	DO
GN-GSA-MW-2	10/22/2018 16:52	-27.4	mv	Oxidation Reduction Potential
GN-GSA-MW-2	10/22/2018 16:52	7.06	pH	pH
GN-GSA-MW-2	10/22/2018 16:52	20.54	C	Temperature
GN-GSA-MW-2	10/22/2018 16:52	1.19	NTU	Turbidity
GN-GSA-MW-2	10/22/2018 16:57	559.2	uS/cm	Conductivity
GN-GSA-MW-2	10/22/2018 16:57	25.23	ft	Depth to Water Detail
GN-GSA-MW-2	10/22/2018 16:57	1.96	mg/L	DO
GN-GSA-MW-2	10/22/2018 16:57	-17.4	mv	Oxidation Reduction Potential
GN-GSA-MW-2	10/22/2018 16:57	7.06	pH	pH
GN-GSA-MW-2	10/22/2018 16:57	20.42	C	Temperature
GN-GSA-MW-2	10/22/2018 16:57	1.14	NTU	Turbidity
GN-GSA-MW-2	10/22/2018 17:03	558.7	uS/cm	Conductivity
GN-GSA-MW-2	10/22/2018 17:03	25.28	ft	Depth to Water Detail
GN-GSA-MW-2	10/22/2018 17:03	1.98	mg/L	DO
GN-GSA-MW-2	10/22/2018 17:03	-9.3	mv	Oxidation Reduction Potential
GN-GSA-MW-2	10/22/2018 17:03	7.06	pH	pH
GN-GSA-MW-2	10/22/2018 17:03	20.19	C	Temperature
GN-GSA-MW-2	10/22/2018 17:03	0.95	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-3	10/23/2018 10:02	388.7	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:02	26.47	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:02	1.56	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:02	72.2	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:02	6.54	pH	pH
GN-GSA-MW-3	10/23/2018 10:02	20.13	C	Temperature
GN-GSA-MW-3	10/23/2018 10:02	0.82	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:07	372.1	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:07	27.1	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:07	0.97	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:07	73.7	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:07	6.57	pH	pH
GN-GSA-MW-3	10/23/2018 10:07	19.86	C	Temperature
GN-GSA-MW-3	10/23/2018 10:07	1.12	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:12	369.6	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:12	27.41	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:12	0.89	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:12	72.8	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:12	6.58	pH	pH
GN-GSA-MW-3	10/23/2018 10:12	19.72	C	Temperature
GN-GSA-MW-3	10/23/2018 10:12	1	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:17	364.8	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:17	27.73	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:17	0.85	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:17	72.5	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:17	6.59	pH	pH
GN-GSA-MW-3	10/23/2018 10:17	19.61	C	Temperature
GN-GSA-MW-3	10/23/2018 10:17	1.25	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:22	360.3	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:22	27.96	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:22	0.85	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:22	72.4	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:22	6.59	pH	pH
GN-GSA-MW-3	10/23/2018 10:22	19.72	C	Temperature
GN-GSA-MW-3	10/23/2018 10:22	1.23	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:27	355.6	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:27	28.22	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:27	0.9	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:27	72.4	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:27	6.59	pH	pH
GN-GSA-MW-3	10/23/2018 10:27	19.88	C	Temperature
GN-GSA-MW-3	10/23/2018 10:27	1.45	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:32	353.8	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:32	28.3	ft	Depth to Water Detail

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-3	10/23/2018 10:32	0.92	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:32	72.5	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:32	6.58	pH	pH
GN-GSA-MW-3	10/23/2018 10:32	19.94	C	Temperature
GN-GSA-MW-3	10/23/2018 10:32	1.42	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:37	355.5	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:37	28.51	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:37	0.91	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:37	72.3	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:37	6.58	pH	pH
GN-GSA-MW-3	10/23/2018 10:37	20.17	C	Temperature
GN-GSA-MW-3	10/23/2018 10:37	2.01	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:42	357.4	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:42	28.59	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:42	0.91	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:42	71.8	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:42	6.59	pH	pH
GN-GSA-MW-3	10/23/2018 10:42	20.15	C	Temperature
GN-GSA-MW-3	10/23/2018 10:42	1.86	NTU	Turbidity
GN-GSA-MW-3	10/23/2018 10:48	359.9	uS/cm	Conductivity
GN-GSA-MW-3	10/23/2018 10:48	28.69	ft	Depth to Water Detail
GN-GSA-MW-3	10/23/2018 10:48	0.89	mg/L	DO
GN-GSA-MW-3	10/23/2018 10:48	71.3	mv	Oxidation Reduction Potential
GN-GSA-MW-3	10/23/2018 10:48	6.59	pH	pH
GN-GSA-MW-3	10/23/2018 10:48	20.3	C	Temperature
GN-GSA-MW-3	10/23/2018 10:48	1.46	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-5	10/22/2018 9:30	670.7	uS/cm	Conductivity
GN-GSA-MW-5	10/22/2018 9:30	33.55	ft	Depth to Water Detail
GN-GSA-MW-5	10/22/2018 9:30	0.75	mg/L	DO
GN-GSA-MW-5	10/22/2018 9:30	-94.1	mv	Oxidation Reduction Potential
GN-GSA-MW-5	10/22/2018 9:30	6.53	pH	pH
GN-GSA-MW-5	10/22/2018 9:30	19.01	C	Temperature
GN-GSA-MW-5	10/22/2018 9:30	3.45	NTU	Turbidity
GN-GSA-MW-5	10/22/2018 9:35	0	uS/cm	Conductivity
GN-GSA-MW-5	10/22/2018 9:35	33.55	ft	Depth to Water Detail
GN-GSA-MW-5	10/22/2018 9:35	9.04	mg/L	DO
GN-GSA-MW-5	10/22/2018 9:35	4	mv	Oxidation Reduction Potential
GN-GSA-MW-5	10/22/2018 9:35	6.51	pH	pH
GN-GSA-MW-5	10/22/2018 9:35	19.94	C	Temperature
GN-GSA-MW-5	10/22/2018 9:35	1.81	NTU	Turbidity
GN-GSA-MW-5	10/22/2018 9:40	598.1	uS/cm	Conductivity
GN-GSA-MW-5	10/22/2018 9:40	33.55	ft	Depth to Water Detail
GN-GSA-MW-5	10/22/2018 9:40	0.28	mg/L	DO
GN-GSA-MW-5	10/22/2018 9:40	-62.6	mv	Oxidation Reduction Potential
GN-GSA-MW-5	10/22/2018 9:40	6.51	pH	pH
GN-GSA-MW-5	10/22/2018 9:40	18.95	C	Temperature
GN-GSA-MW-5	10/22/2018 9:40	1.31	NTU	Turbidity
GN-GSA-MW-5	10/22/2018 9:45	577.7	uS/cm	Conductivity
GN-GSA-MW-5	10/22/2018 9:45	33.55	ft	Depth to Water Detail
GN-GSA-MW-5	10/22/2018 9:45	0.26	mg/L	DO
GN-GSA-MW-5	10/22/2018 9:45	-59.4	mv	Oxidation Reduction Potential
GN-GSA-MW-5	10/22/2018 9:45	6.5	pH	pH
GN-GSA-MW-5	10/22/2018 9:45	18.92	C	Temperature
GN-GSA-MW-5	10/22/2018 9:45	0.82	NTU	Turbidity
GN-GSA-MW-5	10/22/2018 9:50	560	uS/cm	Conductivity
GN-GSA-MW-5	10/22/2018 9:50	33.55	ft	Depth to Water Detail
GN-GSA-MW-5	10/22/2018 9:50	0.26	mg/L	DO
GN-GSA-MW-5	10/22/2018 9:50	-54.3	mv	Oxidation Reduction Potential
GN-GSA-MW-5	10/22/2018 9:50	6.49	pH	pH
GN-GSA-MW-5	10/22/2018 9:50	18.89	C	Temperature
GN-GSA-MW-5	10/22/2018 9:50	0.84	NTU	Turbidity
GN-GSA-MW-5	10/22/2018 9:55	555.6	uS/cm	Conductivity
GN-GSA-MW-5	10/22/2018 9:55	33.55	ft	Depth to Water Detail
GN-GSA-MW-5	10/22/2018 9:55	0.25	mg/L	DO
GN-GSA-MW-5	10/22/2018 9:55	-53.4	mv	Oxidation Reduction Potential
GN-GSA-MW-5	10/22/2018 9:55	6.48	pH	pH
GN-GSA-MW-5	10/22/2018 9:55	18.92	C	Temperature
GN-GSA-MW-5	10/22/2018 9:55	1.16	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-6	10/22/2018 10:34	28.2	uS/cm	Conductivity
GN-GSA-MW-6	10/22/2018 10:34	32.36	ft	Depth to Water Detail
GN-GSA-MW-6	10/22/2018 10:34	1.01	mg/L	DO
GN-GSA-MW-6	10/22/2018 10:34	269.1	mv	Oxidation Reduction Potential
GN-GSA-MW-6	10/22/2018 10:34	4.78	pH	pH
GN-GSA-MW-6	10/22/2018 10:34	20.25	C	Temperature
GN-GSA-MW-6	10/22/2018 10:34	6.76	NTU	Turbidity
GN-GSA-MW-6	10/22/2018 10:39	28.5	uS/cm	Conductivity
GN-GSA-MW-6	10/22/2018 10:39	32.36	ft	Depth to Water Detail
GN-GSA-MW-6	10/22/2018 10:39	0.41	mg/L	DO
GN-GSA-MW-6	10/22/2018 10:39	245.1	mv	Oxidation Reduction Potential
GN-GSA-MW-6	10/22/2018 10:39	4.73	pH	pH
GN-GSA-MW-6	10/22/2018 10:39	20.35	C	Temperature
GN-GSA-MW-6	10/22/2018 10:39	4.42	NTU	Turbidity
GN-GSA-MW-6	10/22/2018 10:44	28.4	uS/cm	Conductivity
GN-GSA-MW-6	10/22/2018 10:44	32.36	ft	Depth to Water Detail
GN-GSA-MW-6	10/22/2018 10:44	0.27	mg/L	DO
GN-GSA-MW-6	10/22/2018 10:44	228.4	mv	Oxidation Reduction Potential
GN-GSA-MW-6	10/22/2018 10:44	4.69	pH	pH
GN-GSA-MW-6	10/22/2018 10:44	20.32	C	Temperature
GN-GSA-MW-6	10/22/2018 10:44	1.31	NTU	Turbidity
GN-GSA-MW-6	10/22/2018 10:49	28.3	uS/cm	Conductivity
GN-GSA-MW-6	10/22/2018 10:49	32.36	ft	Depth to Water Detail
GN-GSA-MW-6	10/22/2018 10:49	0.24	mg/L	DO
GN-GSA-MW-6	10/22/2018 10:49	215	mv	Oxidation Reduction Potential
GN-GSA-MW-6	10/22/2018 10:49	4.68	pH	pH
GN-GSA-MW-6	10/22/2018 10:49	20.42	C	Temperature
GN-GSA-MW-6	10/22/2018 10:49	1.13	NTU	Turbidity
GN-GSA-MW-6	10/22/2018 10:54	28	uS/cm	Conductivity
GN-GSA-MW-6	10/22/2018 10:54	32.36	ft	Depth to Water Detail
GN-GSA-MW-6	10/22/2018 10:54	0.22	mg/L	DO
GN-GSA-MW-6	10/22/2018 10:54	206.1	mv	Oxidation Reduction Potential
GN-GSA-MW-6	10/22/2018 10:54	4.68	pH	pH
GN-GSA-MW-6	10/22/2018 10:54	20.43	C	Temperature
GN-GSA-MW-6	10/22/2018 10:54	1.17	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-7	10/22/2018 11:39	469.7	uS/cm	Conductivity
GN-GSA-MW-7	10/22/2018 11:39	30.15	ft	Depth to Water Detail
GN-GSA-MW-7	10/22/2018 11:39	0.73	mg/L	DO
GN-GSA-MW-7	10/22/2018 11:39	23.9	mv	Oxidation Reduction Potential
GN-GSA-MW-7	10/22/2018 11:39	6.61	pH	pH
GN-GSA-MW-7	10/22/2018 11:39	21.68	C	Temperature
GN-GSA-MW-7	10/22/2018 11:39	1.46	NTU	Turbidity
GN-GSA-MW-7	10/22/2018 11:44	469.9	uS/cm	Conductivity
GN-GSA-MW-7	10/22/2018 11:44	30.4	ft	Depth to Water Detail
GN-GSA-MW-7	10/22/2018 11:44	0.55	mg/L	DO
GN-GSA-MW-7	10/22/2018 11:44	32.2	mv	Oxidation Reduction Potential
GN-GSA-MW-7	10/22/2018 11:44	6.68	pH	pH
GN-GSA-MW-7	10/22/2018 11:44	21.46	C	Temperature
GN-GSA-MW-7	10/22/2018 11:44	1.45	NTU	Turbidity
GN-GSA-MW-7	10/22/2018 11:49	464.6	uS/cm	Conductivity
GN-GSA-MW-7	10/22/2018 11:49	30.52	ft	Depth to Water Detail
GN-GSA-MW-7	10/22/2018 11:49	0.51	mg/L	DO
GN-GSA-MW-7	10/22/2018 11:49	34.7	mv	Oxidation Reduction Potential
GN-GSA-MW-7	10/22/2018 11:49	6.7	pH	pH
GN-GSA-MW-7	10/22/2018 11:49	21.38	C	Temperature
GN-GSA-MW-7	10/22/2018 11:49	1.67	NTU	Turbidity
GN-GSA-MW-7	10/22/2018 11:54	454.4	uS/cm	Conductivity
GN-GSA-MW-7	10/22/2018 11:54	30.58	ft	Depth to Water Detail
GN-GSA-MW-7	10/22/2018 11:54	0.67	mg/L	DO
GN-GSA-MW-7	10/22/2018 11:54	39.3	mv	Oxidation Reduction Potential
GN-GSA-MW-7	10/22/2018 11:54	6.71	pH	pH
GN-GSA-MW-7	10/22/2018 11:54	21.76	C	Temperature
GN-GSA-MW-7	10/22/2018 11:54	1.25	NTU	Turbidity
GN-GSA-MW-7	10/22/2018 11:59	442.1	uS/cm	Conductivity
GN-GSA-MW-7	10/22/2018 11:59	30.64	ft	Depth to Water Detail
GN-GSA-MW-7	10/22/2018 11:59	1.04	mg/L	DO
GN-GSA-MW-7	10/22/2018 11:59	44.7	mv	Oxidation Reduction Potential
GN-GSA-MW-7	10/22/2018 11:59	6.72	pH	pH
GN-GSA-MW-7	10/22/2018 11:59	21.68	C	Temperature
GN-GSA-MW-7	10/22/2018 11:59	1.37	NTU	Turbidity
GN-GSA-MW-7	10/22/2018 12:04	437.3	uS/cm	Conductivity
GN-GSA-MW-7	10/22/2018 12:04	30.7	ft	Depth to Water Detail
GN-GSA-MW-7	10/22/2018 12:04	1.27	mg/L	DO
GN-GSA-MW-7	10/22/2018 12:04	46.2	mv	Oxidation Reduction Potential
GN-GSA-MW-7	10/22/2018 12:04	6.72	pH	pH
GN-GSA-MW-7	10/22/2018 12:04	21.82	C	Temperature
GN-GSA-MW-7	10/22/2018 12:04	1.27	NTU	Turbidity
GN-GSA-MW-7	10/22/2018 12:09	435.3	uS/cm	Conductivity
GN-GSA-MW-7	10/22/2018 12:09	30.72	ft	Depth to Water Detail

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-7	10/22/2018 12:09	1.33	mg/L	DO
GN-GSA-MW-7	10/22/2018 12:09	46.9	mv	Oxidation Reduction Potention
GN-GSA-MW-7	10/22/2018 12:09	6.72	pH	pH
GN-GSA-MW-7	10/22/2018 12:09	21.86	C	Temperature
GN-GSA-MW-7	10/22/2018 12:09	1.3	NTU	Turbidity
GN-GSA-MW-7	10/22/2018 12:15	432	uS/cm	Conductivity
GN-GSA-MW-7	10/22/2018 12:15	30.73	ft	Depth to Water Detail
GN-GSA-MW-7	10/22/2018 12:15	1.28	mg/L	DO
GN-GSA-MW-7	10/22/2018 12:15	47.8	mv	Oxidation Reduction Potention
GN-GSA-MW-7	10/22/2018 12:15	6.71	pH	pH
GN-GSA-MW-7	10/22/2018 12:15	21.91	C	Temperature
GN-GSA-MW-7	10/22/2018 12:15	1.33	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-8	10/22/2018 13:32	350.2	uS/cm	Conductivity
GN-GSA-MW-8	10/22/2018 13:32	24.2	ft	Depth to Water Detail
GN-GSA-MW-8	10/22/2018 13:32	0.23	mg/L	DO
GN-GSA-MW-8	10/22/2018 13:32	-88	mv	Oxidation Reduction Potential
GN-GSA-MW-8	10/22/2018 13:32	7.25	pH	pH
GN-GSA-MW-8	10/22/2018 13:32	21.02	C	Temperature
GN-GSA-MW-8	10/22/2018 13:32	1.47	NTU	Turbidity
GN-GSA-MW-8	10/22/2018 13:37	350.3	uS/cm	Conductivity
GN-GSA-MW-8	10/22/2018 13:37	24.33	ft	Depth to Water Detail
GN-GSA-MW-8	10/22/2018 13:37	0.22	mg/L	DO
GN-GSA-MW-8	10/22/2018 13:37	-89.7	mv	Oxidation Reduction Potential
GN-GSA-MW-8	10/22/2018 13:37	7.29	pH	pH
GN-GSA-MW-8	10/22/2018 13:37	21.02	C	Temperature
GN-GSA-MW-8	10/22/2018 13:37	1.35	NTU	Turbidity
GN-GSA-MW-8	10/22/2018 13:42	349.6	uS/cm	Conductivity
GN-GSA-MW-8	10/22/2018 13:42	24.35	ft	Depth to Water Detail
GN-GSA-MW-8	10/22/2018 13:42	0.21	mg/L	DO
GN-GSA-MW-8	10/22/2018 13:42	-101.6	mv	Oxidation Reduction Potential
GN-GSA-MW-8	10/22/2018 13:42	7.31	pH	pH
GN-GSA-MW-8	10/22/2018 13:42	20.84	C	Temperature
GN-GSA-MW-8	10/22/2018 13:42	1.27	NTU	Turbidity
GN-GSA-MW-8	10/22/2018 13:47	350.4	uS/cm	Conductivity
GN-GSA-MW-8	10/22/2018 13:47	24.46	ft	Depth to Water Detail
GN-GSA-MW-8	10/22/2018 13:47	0.22	mg/L	DO
GN-GSA-MW-8	10/22/2018 13:47	-119.4	mv	Oxidation Reduction Potential
GN-GSA-MW-8	10/22/2018 13:47	7.33	pH	pH
GN-GSA-MW-8	10/22/2018 13:47	20.75	C	Temperature
GN-GSA-MW-8	10/22/2018 13:47	1.4	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-9	10/22/2018 14:36	211.7	uS/cm	Conductivity
GN-GSA-MW-9	10/22/2018 14:36	24.75	ft	Depth to Water Detail
GN-GSA-MW-9	10/22/2018 14:36	0.26	mg/L	DO
GN-GSA-MW-9	10/22/2018 14:36	41.1	mv	Oxidation Reduction Potential
GN-GSA-MW-9	10/22/2018 14:36	6.41	pH	pH
GN-GSA-MW-9	10/22/2018 14:36	21.28	C	Temperature
GN-GSA-MW-9	10/22/2018 14:36	4.35	NTU	Turbidity
GN-GSA-MW-9	10/22/2018 14:41	255.8	uS/cm	Conductivity
GN-GSA-MW-9	10/22/2018 14:41	24.65	ft	Depth to Water Detail
GN-GSA-MW-9	10/22/2018 14:41	0.25	mg/L	DO
GN-GSA-MW-9	10/22/2018 14:41	-3.2	mv	Oxidation Reduction Potential
GN-GSA-MW-9	10/22/2018 14:41	6.52	pH	pH
GN-GSA-MW-9	10/22/2018 14:41	21.19	C	Temperature
GN-GSA-MW-9	10/22/2018 14:41	4.88	NTU	Turbidity
GN-GSA-MW-9	10/22/2018 14:46	279.2	uS/cm	Conductivity
GN-GSA-MW-9	10/22/2018 14:46	24.58	ft	Depth to Water Detail
GN-GSA-MW-9	10/22/2018 14:46	0.24	mg/L	DO
GN-GSA-MW-9	10/22/2018 14:46	-19	mv	Oxidation Reduction Potential
GN-GSA-MW-9	10/22/2018 14:46	6.62	pH	pH
GN-GSA-MW-9	10/22/2018 14:46	21.16	C	Temperature
GN-GSA-MW-9	10/22/2018 14:46	2.94	NTU	Turbidity
GN-GSA-MW-9	10/22/2018 14:52	296	uS/cm	Conductivity
GN-GSA-MW-9	10/22/2018 14:52	24.55	ft	Depth to Water Detail
GN-GSA-MW-9	10/22/2018 14:52	0.24	mg/L	DO
GN-GSA-MW-9	10/22/2018 14:52	-28	mv	Oxidation Reduction Potential
GN-GSA-MW-9	10/22/2018 14:52	6.7	pH	pH
GN-GSA-MW-9	10/22/2018 14:52	21.28	C	Temperature
GN-GSA-MW-9	10/22/2018 14:52	2.22	NTU	Turbidity
GN-GSA-MW-9	10/22/2018 14:57	308.1	uS/cm	Conductivity
GN-GSA-MW-9	10/22/2018 14:57	24.5	ft	Depth to Water Detail
GN-GSA-MW-9	10/22/2018 14:57	0.23	mg/L	DO
GN-GSA-MW-9	10/22/2018 14:57	-33.7	mv	Oxidation Reduction Potential
GN-GSA-MW-9	10/22/2018 14:57	6.77	pH	pH
GN-GSA-MW-9	10/22/2018 14:57	21.27	C	Temperature
GN-GSA-MW-9	10/22/2018 14:57	1.92	NTU	Turbidity
GN-GSA-MW-9	10/22/2018 15:02	316.7	uS/cm	Conductivity
GN-GSA-MW-9	10/22/2018 15:02	24.61	ft	Depth to Water Detail
GN-GSA-MW-9	10/22/2018 15:02	0.23	mg/L	DO
GN-GSA-MW-9	10/22/2018 15:02	-36.6	mv	Oxidation Reduction Potential
GN-GSA-MW-9	10/22/2018 15:02	6.82	pH	pH
GN-GSA-MW-9	10/22/2018 15:02	21.15	C	Temperature
GN-GSA-MW-9	10/22/2018 15:02	2.12	NTU	Turbidity
GN-GSA-MW-9	10/22/2018 15:07	320.4	uS/cm	Conductivity
GN-GSA-MW-9	10/22/2018 15:07	24.61	ft	Depth to Water Detail

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-9	10/22/2018 15:07	0.23	mg/L	DO
GN-GSA-MW-9	10/22/2018 15:07	-38.2	mv	Oxidation Reduction Potention
GN-GSA-MW-9	10/22/2018 15:07	6.86	pH	pH
GN-GSA-MW-9	10/22/2018 15:07	21.24	C	Temperature
GN-GSA-MW-9	10/22/2018 15:07	1.97	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-10	10/24/2018 12:38	435.3	uS/cm	Conductivity
GN-GSA-MW-10	10/24/2018 12:38	24.62	ft	Depth to Water Detail
GN-GSA-MW-10	10/24/2018 12:38	0.13	mg/L	DO
GN-GSA-MW-10	10/24/2018 12:38	197.2	mv	Oxidation Reduction Potential
GN-GSA-MW-10	10/24/2018 12:38	7.11	pH	pH
GN-GSA-MW-10	10/24/2018 12:38	21.76	C	Temperature
GN-GSA-MW-10	10/24/2018 12:38	0.49	NTU	Turbidity
GN-GSA-MW-10	10/24/2018 12:43	434.7	uS/cm	Conductivity
GN-GSA-MW-10	10/24/2018 12:43	24.64	ft	Depth to Water Detail
GN-GSA-MW-10	10/24/2018 12:43	0.11	mg/L	DO
GN-GSA-MW-10	10/24/2018 12:43	301.8	mv	Oxidation Reduction Potential
GN-GSA-MW-10	10/24/2018 12:43	7.11	pH	pH
GN-GSA-MW-10	10/24/2018 12:43	21.81	C	Temperature
GN-GSA-MW-10	10/24/2018 12:43	0.52	NTU	Turbidity
GN-GSA-MW-10	10/24/2018 12:53	432.6	uS/cm	Conductivity
GN-GSA-MW-10	10/24/2018 12:53	24.65	ft	Depth to Water Detail
GN-GSA-MW-10	10/24/2018 12:53	0.1	mg/L	DO
GN-GSA-MW-10	10/24/2018 12:53	477.8	mv	Oxidation Reduction Potential
GN-GSA-MW-10	10/24/2018 12:53	7.12	pH	pH
GN-GSA-MW-10	10/24/2018 12:53	21.79	C	Temperature
GN-GSA-MW-10	10/24/2018 12:53	0.49	NTU	Turbidity
GN-GSA-MW-10	10/24/2018 12:58	431.9	uS/cm	Conductivity
GN-GSA-MW-10	10/24/2018 12:58	24.65	ft	Depth to Water Detail
GN-GSA-MW-10	10/24/2018 12:58	0.1	mg/L	DO
GN-GSA-MW-10	10/24/2018 12:58	516.5	mv	Oxidation Reduction Potential
GN-GSA-MW-10	10/24/2018 12:58	7.13	pH	pH
GN-GSA-MW-10	10/24/2018 12:58	21.83	C	Temperature
GN-GSA-MW-10	10/24/2018 12:58	0.7	NTU	Turbidity
GN-GSA-MW-10	10/24/2018 13:03	431.4	uS/cm	Conductivity
GN-GSA-MW-10	10/24/2018 13:03	24.65	ft	Depth to Water Detail
GN-GSA-MW-10	10/24/2018 13:03	0.1	mg/L	DO
GN-GSA-MW-10	10/24/2018 13:03	543.1	mv	Oxidation Reduction Potential
GN-GSA-MW-10	10/24/2018 13:03	7.14	pH	pH
GN-GSA-MW-10	10/24/2018 13:03	21.87	C	Temperature
GN-GSA-MW-10	10/24/2018 13:03	0.54	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-11	10/24/2018 10:51	180.2	uS/cm	Conductivity
GN-GSA-MW-11	10/24/2018 10:51	23.72	ft	Depth to Water Detail
GN-GSA-MW-11	10/24/2018 10:51	0.59	mg/L	DO
GN-GSA-MW-11	10/24/2018 10:51	85.5	mv	Oxidation Reduction Potential
GN-GSA-MW-11	10/24/2018 10:51	6.63	pH	pH
GN-GSA-MW-11	10/24/2018 10:51	21.67	C	Temperature
GN-GSA-MW-11	10/24/2018 10:51	2.4	NTU	Turbidity
GN-GSA-MW-11	10/24/2018 10:56	211.7	uS/cm	Conductivity
GN-GSA-MW-11	10/24/2018 10:56	23.72	ft	Depth to Water Detail
GN-GSA-MW-11	10/24/2018 10:56	0.37	mg/L	DO
GN-GSA-MW-11	10/24/2018 10:56	44.6	mv	Oxidation Reduction Potential
GN-GSA-MW-11	10/24/2018 10:56	6.32	pH	pH
GN-GSA-MW-11	10/24/2018 10:56	21.76	C	Temperature
GN-GSA-MW-11	10/24/2018 10:56	2.26	NTU	Turbidity
GN-GSA-MW-11	10/24/2018 11:01	189.2	uS/cm	Conductivity
GN-GSA-MW-11	10/24/2018 11:01	23.72	ft	Depth to Water Detail
GN-GSA-MW-11	10/24/2018 11:01	0.26	mg/L	DO
GN-GSA-MW-11	10/24/2018 11:01	39.6	mv	Oxidation Reduction Potential
GN-GSA-MW-11	10/24/2018 11:01	6.3	pH	pH
GN-GSA-MW-11	10/24/2018 11:01	21.82	C	Temperature
GN-GSA-MW-11	10/24/2018 11:01	1.06	NTU	Turbidity
GN-GSA-MW-11	10/24/2018 11:06	155.7	uS/cm	Conductivity
GN-GSA-MW-11	10/24/2018 11:06	23.72	ft	Depth to Water Detail
GN-GSA-MW-11	10/24/2018 11:06	0.21	mg/L	DO
GN-GSA-MW-11	10/24/2018 11:06	49.1	mv	Oxidation Reduction Potential
GN-GSA-MW-11	10/24/2018 11:06	6.22	pH	pH
GN-GSA-MW-11	10/24/2018 11:06	21.82	C	Temperature
GN-GSA-MW-11	10/24/2018 11:06	0.95	NTU	Turbidity
GN-GSA-MW-11	10/24/2018 11:11	145.6	uS/cm	Conductivity
GN-GSA-MW-11	10/24/2018 11:11	23.72	ft	Depth to Water Detail
GN-GSA-MW-11	10/24/2018 11:11	0.16	mg/L	DO
GN-GSA-MW-11	10/24/2018 11:11	53.8	mv	Oxidation Reduction Potential
GN-GSA-MW-11	10/24/2018 11:11	6.17	pH	pH
GN-GSA-MW-11	10/24/2018 11:11	21.82	C	Temperature
GN-GSA-MW-11	10/24/2018 11:11	0.8	NTU	Turbidity
GN-GSA-MW-11	10/24/2018 11:16	132.3	uS/cm	Conductivity
GN-GSA-MW-11	10/24/2018 11:16	23.72	ft	Depth to Water Detail
GN-GSA-MW-11	10/24/2018 11:16	0.16	mg/L	DO
GN-GSA-MW-11	10/24/2018 11:16	58.4	mv	Oxidation Reduction Potential
GN-GSA-MW-11	10/24/2018 11:16	6.14	pH	pH
GN-GSA-MW-11	10/24/2018 11:16	21.84	C	Temperature
GN-GSA-MW-11	10/24/2018 11:16	0.51	NTU	Turbidity
GN-GSA-MW-11	10/24/2018 11:21	132.8	uS/cm	Conductivity
GN-GSA-MW-11	10/24/2018 11:21	23.72	ft	Depth to Water Detail

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-11	10/24/2018 11:21	0.15	mg/L	DO
GN-GSA-MW-11	10/24/2018 11:21	60.2	mv	Oxidation Reduction Potential
GN-GSA-MW-11	10/24/2018 11:21	6.1	pH	pH
GN-GSA-MW-11	10/24/2018 11:21	21.87	C	Temperature
GN-GSA-MW-11	10/24/2018 11:21	0.82	NTU	Turbidity
GN-GSA-MW-11	10/24/2018 11:26	126.6	uS/cm	Conductivity
GN-GSA-MW-11	10/24/2018 11:26	23.72	ft	Depth to Water Detail
GN-GSA-MW-11	10/24/2018 11:26	0.13	mg/L	DO
GN-GSA-MW-11	10/24/2018 11:26	63.3	mv	Oxidation Reduction Potential
GN-GSA-MW-11	10/24/2018 11:26	6.09	pH	pH
GN-GSA-MW-11	10/24/2018 11:26	21.87	C	Temperature
GN-GSA-MW-11	10/24/2018 11:26	0.57	NTU	Turbidity

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Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-12	10/23/2018 12:35	370.7	uS/cm	Conductivity
GN-GSA-MW-12	10/23/2018 12:35	22.3	ft	Depth to Water Detail
GN-GSA-MW-12	10/23/2018 12:35	0.2	mg/L	DO
GN-GSA-MW-12	10/23/2018 12:35	-104.5	mv	Oxidation Reduction Potential
GN-GSA-MW-12	10/23/2018 12:35	7.24	pH	pH
GN-GSA-MW-12	10/23/2018 12:35	21.33	C	Temperature
GN-GSA-MW-12	10/23/2018 12:35	4.01	NTU	Turbidity
GN-GSA-MW-12	10/23/2018 12:40	361.7	uS/cm	Conductivity
GN-GSA-MW-12	10/23/2018 12:40	22.3	ft	Depth to Water Detail
GN-GSA-MW-12	10/23/2018 12:40	0.25	mg/L	DO
GN-GSA-MW-12	10/23/2018 12:40	-89.5	mv	Oxidation Reduction Potential
GN-GSA-MW-12	10/23/2018 12:40	7.24	pH	pH
GN-GSA-MW-12	10/23/2018 12:40	21.39	C	Temperature
GN-GSA-MW-12	10/23/2018 12:40	2.21	NTU	Turbidity
GN-GSA-MW-12	10/23/2018 12:45	355.9	uS/cm	Conductivity
GN-GSA-MW-12	10/23/2018 12:45	22.3	ft	Depth to Water Detail
GN-GSA-MW-12	10/23/2018 12:45	0.25	mg/L	DO
GN-GSA-MW-12	10/23/2018 12:45	-80.8	mv	Oxidation Reduction Potential
GN-GSA-MW-12	10/23/2018 12:45	7.23	pH	pH
GN-GSA-MW-12	10/23/2018 12:45	21.44	C	Temperature
GN-GSA-MW-12	10/23/2018 12:45	1.42	NTU	Turbidity
GN-GSA-MW-12	10/23/2018 12:51	350.2	uS/cm	Conductivity
GN-GSA-MW-12	10/23/2018 12:51	22.3	ft	Depth to Water Detail
GN-GSA-MW-12	10/23/2018 12:51	0.23	mg/L	DO
GN-GSA-MW-12	10/23/2018 12:51	-74.1	mv	Oxidation Reduction Potential
GN-GSA-MW-12	10/23/2018 12:51	7.22	pH	pH
GN-GSA-MW-12	10/23/2018 12:51	21.44	C	Temperature
GN-GSA-MW-12	10/23/2018 12:51	1.28	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-13	10/23/2018 13:35	474.7	uS/cm	Conductivity
GN-GSA-MW-13	10/23/2018 13:35	28	ft	Depth to Water Detail
GN-GSA-MW-13	10/23/2018 13:35	0.36	mg/L	DO
GN-GSA-MW-13	10/23/2018 13:35	52.3	mv	Oxidation Reduction Potential
GN-GSA-MW-13	10/23/2018 13:35	7.13	pH	pH
GN-GSA-MW-13	10/23/2018 13:35	20.57	C	Temperature
GN-GSA-MW-13	10/23/2018 13:35	1.43	NTU	Turbidity
GN-GSA-MW-13	10/23/2018 13:40	474	uS/cm	Conductivity
GN-GSA-MW-13	10/23/2018 13:40	28	ft	Depth to Water Detail
GN-GSA-MW-13	10/23/2018 13:40	0.32	mg/L	DO
GN-GSA-MW-13	10/23/2018 13:40	52.3	mv	Oxidation Reduction Potential
GN-GSA-MW-13	10/23/2018 13:40	7.1	pH	pH
GN-GSA-MW-13	10/23/2018 13:40	20.39	C	Temperature
GN-GSA-MW-13	10/23/2018 13:40	1.06	NTU	Turbidity
GN-GSA-MW-13	10/23/2018 13:45	472.8	uS/cm	Conductivity
GN-GSA-MW-13	10/23/2018 13:45	28	ft	Depth to Water Detail
GN-GSA-MW-13	10/23/2018 13:45	0.31	mg/L	DO
GN-GSA-MW-13	10/23/2018 13:45	52.4	mv	Oxidation Reduction Potential
GN-GSA-MW-13	10/23/2018 13:45	7.09	pH	pH
GN-GSA-MW-13	10/23/2018 13:45	20.31	C	Temperature
GN-GSA-MW-13	10/23/2018 13:45	2.27	NTU	Turbidity
GN-GSA-MW-13	10/23/2018 13:50	471	uS/cm	Conductivity
GN-GSA-MW-13	10/23/2018 13:50	28	ft	Depth to Water Detail
GN-GSA-MW-13	10/23/2018 13:50	0.32	mg/L	DO
GN-GSA-MW-13	10/23/2018 13:50	52.5	mv	Oxidation Reduction Potential
GN-GSA-MW-13	10/23/2018 13:50	7.09	pH	pH
GN-GSA-MW-13	10/23/2018 13:50	20.31	C	Temperature
GN-GSA-MW-13	10/23/2018 13:50	2.04	NTU	Turbidity

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Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-14S	10/23/2018 11:34	310.3	uS/cm	Conductivity
GN-GSA-MW-14S	10/23/2018 11:34	26.35	ft	Depth to Water Detail
GN-GSA-MW-14S	10/23/2018 11:34	0.33	mg/L	DO
GN-GSA-MW-14S	10/23/2018 11:34	58	mv	Oxidation Reduction Potential
GN-GSA-MW-14S	10/23/2018 11:34	7.22	pH	pH
GN-GSA-MW-14S	10/23/2018 11:34	20.19	C	Temperature
GN-GSA-MW-14S	10/23/2018 11:34	2.05	NTU	Turbidity
GN-GSA-MW-14S	10/23/2018 11:39	313.6	uS/cm	Conductivity
GN-GSA-MW-14S	10/23/2018 11:39	26.35	ft	Depth to Water Detail
GN-GSA-MW-14S	10/23/2018 11:39	0.22	mg/L	DO
GN-GSA-MW-14S	10/23/2018 11:39	52.8	mv	Oxidation Reduction Potential
GN-GSA-MW-14S	10/23/2018 11:39	7.27	pH	pH
GN-GSA-MW-14S	10/23/2018 11:39	20.15	C	Temperature
GN-GSA-MW-14S	10/23/2018 11:39	3.51	NTU	Turbidity
GN-GSA-MW-14S	10/23/2018 11:44	335	uS/cm	Conductivity
GN-GSA-MW-14S	10/23/2018 11:44	26.35	ft	Depth to Water Detail
GN-GSA-MW-14S	10/23/2018 11:44	0.19	mg/L	DO
GN-GSA-MW-14S	10/23/2018 11:44	-33.6	mv	Oxidation Reduction Potential
GN-GSA-MW-14S	10/23/2018 11:44	7.33	pH	pH
GN-GSA-MW-14S	10/23/2018 11:44	20.1	C	Temperature
GN-GSA-MW-14S	10/23/2018 11:44	2.76	NTU	Turbidity
GN-GSA-MW-14S	10/23/2018 11:49	340.2	uS/cm	Conductivity
GN-GSA-MW-14S	10/23/2018 11:49	26.35	ft	Depth to Water Detail
GN-GSA-MW-14S	10/23/2018 11:49	0.18	mg/L	DO
GN-GSA-MW-14S	10/23/2018 11:49	-66.8	mv	Oxidation Reduction Potential
GN-GSA-MW-14S	10/23/2018 11:49	7.37	pH	pH
GN-GSA-MW-14S	10/23/2018 11:49	20.17	C	Temperature
GN-GSA-MW-14S	10/23/2018 11:49	2.17	NTU	Turbidity
GN-GSA-MW-14S	10/23/2018 11:54	342.7	uS/cm	Conductivity
GN-GSA-MW-14S	10/23/2018 11:54	26.35	ft	Depth to Water Detail
GN-GSA-MW-14S	10/23/2018 11:54	0.18	mg/L	DO
GN-GSA-MW-14S	10/23/2018 11:54	-76.1	mv	Oxidation Reduction Potential
GN-GSA-MW-14S	10/23/2018 11:54	7.4	pH	pH
GN-GSA-MW-14S	10/23/2018 11:54	20.05	C	Temperature
GN-GSA-MW-14S	10/23/2018 11:54	2.77	NTU	Turbidity

**Alabama Power Company
Plant Gaston Gypsum Pond**

Well ID	Reading Time	Value	Unit	Description
GN-GSA-MW-15	10/23/2018 8:45	51.4	uS/cm	Conductivity
GN-GSA-MW-15	10/23/2018 8:45	27.12	ft	Depth to Water Detail
GN-GSA-MW-15	10/23/2018 8:45	1.07	mg/L	DO
GN-GSA-MW-15	10/23/2018 8:45	113.6	mv	Oxidation Reduction Potential
GN-GSA-MW-15	10/23/2018 8:45	5.87	pH	pH
GN-GSA-MW-15	10/23/2018 8:45	18.9	C	Temperature
GN-GSA-MW-15	10/23/2018 8:45	2.08	NTU	Turbidity
GN-GSA-MW-15	10/23/2018 8:50	47.2	uS/cm	Conductivity
GN-GSA-MW-15	10/23/2018 8:50	27.25	ft	Depth to Water Detail
GN-GSA-MW-15	10/23/2018 8:50	0.85	mg/L	DO
GN-GSA-MW-15	10/23/2018 8:50	113.1	mv	Oxidation Reduction Potential
GN-GSA-MW-15	10/23/2018 8:50	5.83	pH	pH
GN-GSA-MW-15	10/23/2018 8:50	18.97	C	Temperature
GN-GSA-MW-15	10/23/2018 8:50	5.11	NTU	Turbidity
GN-GSA-MW-15	10/23/2018 8:55	45.3	uS/cm	Conductivity
GN-GSA-MW-15	10/23/2018 8:55	27.45	ft	Depth to Water Detail
GN-GSA-MW-15	10/23/2018 8:55	0.81	mg/L	DO
GN-GSA-MW-15	10/23/2018 8:55	112.7	mv	Oxidation Reduction Potential
GN-GSA-MW-15	10/23/2018 8:55	5.84	pH	pH
GN-GSA-MW-15	10/23/2018 8:55	19.02	C	Temperature
GN-GSA-MW-15	10/23/2018 8:55	1.67	NTU	Turbidity
GN-GSA-MW-15	10/23/2018 9:00	45	uS/cm	Conductivity
GN-GSA-MW-15	10/23/2018 9:00	27.62	ft	Depth to Water Detail
GN-GSA-MW-15	10/23/2018 9:00	0.79	mg/L	DO
GN-GSA-MW-15	10/23/2018 9:00	112	mv	Oxidation Reduction Potential
GN-GSA-MW-15	10/23/2018 9:00	5.84	pH	pH
GN-GSA-MW-15	10/23/2018 9:00	19.1	C	Temperature
GN-GSA-MW-15	10/23/2018 9:00	1.34	NTU	Turbidity
GN-GSA-MW-15	10/23/2018 9:05	44.6	uS/cm	Conductivity
GN-GSA-MW-15	10/23/2018 9:05	27.72	ft	Depth to Water Detail
GN-GSA-MW-15	10/23/2018 9:05	0.76	mg/L	DO
GN-GSA-MW-15	10/23/2018 9:05	111.5	mv	Oxidation Reduction Potential
GN-GSA-MW-15	10/23/2018 9:05	5.84	pH	pH
GN-GSA-MW-15	10/23/2018 9:05	19.06	C	Temperature
GN-GSA-MW-15	10/23/2018 9:05	1.35	NTU	Turbidity
GN-GSA-MW-15	10/23/2018 9:10	44.4	uS/cm	Conductivity
GN-GSA-MW-15	10/23/2018 9:10	27.82	ft	Depth to Water Detail
GN-GSA-MW-15	10/23/2018 9:10	0.73	mg/L	DO
GN-GSA-MW-15	10/23/2018 9:10	111	mv	Oxidation Reduction Potential
GN-GSA-MW-15	10/23/2018 9:10	5.84	pH	pH
GN-GSA-MW-15	10/23/2018 9:10	19.15	C	Temperature
GN-GSA-MW-15	10/23/2018 9:10	1.37	NTU	Turbidity



E. C. Gaston Gypsum Storage Area

2018 Compliance Sample Event 2 & General Chemistry

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.
 - Field Blank 1 (FB-1) had results greater than the reporting limit (RL) for Bicarbonate Alkalinity.
- Calibration verifications for all required field parameters were performed daily, before and after sample collection.

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


Analytical Report



Sample Group : WMWGASG_1177
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
lbmidkif@southernco.com
(205) 664-6197

The following data has been reviewed and approved by:

Quality Control:  **Laura Midkiff**
Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Power
Company, ou=Environmental Affairs,
email=lbmidkif@southernco.com, c=US
Date: 2018.11.26 14:03:02 -06'00'

Supervision:  **T. Durant
Maske**

Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama
Power Company, ou=Environmental
Affairs, email=tdmaske@southernco.com,
c=US
Date: 2018.11.29 11:16:02 -06'00'

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY25263

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	12.4	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	4.53	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	4.47	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.454	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	1.83	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	1.98	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	30.2	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	6.64	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	204	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.08	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			204	mg/L

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
 LBM 11/26/2018

Alabama Power General Test Laboratory
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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-5

Laboratory ID Number: AY25263

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20
AY25272	Manganese, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY25264

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	J 0.317	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	J 0.0251	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	J 0.0249	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.218	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.0120	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.0103	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	2.56	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	4.89	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	1.46	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.00	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			1.46	mg/L

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Expiration: June 30, 2019

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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6

Laboratory ID Number: AY25264

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25272	Manganese, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY25265

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	10.2	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.0553	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	0.0645	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.730	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.814	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.923	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	6.93	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	6.86	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	210	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.14	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			210	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
 LBM 11/26/2018

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-7

Laboratory ID Number: AY25265

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20
AY25272	Manganese, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY25266

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	11.1	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.508	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	0.532	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 1.38	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.186	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.202	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	1.55	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	7.64	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	183	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.75	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			182	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-8

Laboratory ID Number: AY25266

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20
AY25272	Mangenes, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
 LBM 11/26/2018

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY25267

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	7.34	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.252	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	0.321	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.795	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.0647	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.0642	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	3.68	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	7.26	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	170	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.29	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			170	mg/L

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Expiration: June 30, 2019

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-9

Laboratory ID Number: AY25267

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20
AY25272	Manganese, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY25268

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	21.8	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	J 0.0360	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	J 0.0452	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.518	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	J 0.00301	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	2.68	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	7.28	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	297	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.53	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			296	mg/L

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-2

Laboratory ID Number: AY25268

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20
AY25272	Mangenes, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY25269

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	J 0.402	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.0504	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	J 0.0338	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.327	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.107	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.111	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	1.55	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	5.91	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	13.6	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.00	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			13.6	mg/L

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Expiration: June 30, 2019

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 Calera, AL 35040
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-15

Laboratory ID Number: AY25269

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20
AY25272	Mangenes, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY25270

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	2.86	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	10.7	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.0141	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.0156	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	7.75	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	6.81	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	193	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.12	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			193	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-3

Laboratory ID Number: AY25270

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25272	Mangenes, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY25271

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	9.51	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.0656	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	0.0741	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.917	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.152	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.156	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	22.3	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	7.72	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	191	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0.94	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			190	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2019

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-14S

Laboratory ID Number: AY25271

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25376	pH for Alkalinity	SU						6.96	6.95 to 7.05				
AY25272	Manganese, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27	10

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
 LBM 11/26/2018

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY25272

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	6.20	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.0921	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	0.113	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.290	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.159	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.167	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	4.03	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	7.46	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	185	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0.50	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			184	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12

Laboratory ID Number: AY25272

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25272	Iron, Total	mg/L	-0.000767	0.022	0.2	0.311	0.311	0.202	0.17 to 0.23	99.3	70 to 130	0.0109	20
AY25272	Sodium, Total	mg/L	-0.00418	0.22	5.00	9.33	9.32	5.23	4.25 to 5.75	106	70 to 130	0.0705	20
AY25272	Iron, Dissolved	mg/L	0.00866	0.022	0.2	0.298	0.297	0.201	0.17 to 0.23	103	70 to 130	0.339	20
AY25272	Magnesium, Total	mg/L	-0.0123	0.22	5.00	11.1	11.1	4.99	4.25 to 5.75	97.9	70 to 130	0.110	20
AY25272	Mangenes, Dissolved	mg/L	0.0000212	0.005	0.10	0.263	0.259		0.085 to 0.115	105	70 to 130	1.59	20
AY25272	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.273	0.275	0.100	0.085 to 0.115	106	70 to 130	0.686	20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27	10
AY25272	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.9	10.8	10.2	8.5 to 11.5	106	70 to 130	0.537	20
AY25376	pH for Alkalinity	SU						6.96	6.95 to 7.05				

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY25273

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	9.74	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	J 0.0167	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 1.11	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	J 0.00151	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.0560	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	3.88	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	7.28	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	260	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0.47	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			260	mg/L

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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-13

Laboratory ID Number: AY25273

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AY25376	pH for Alkalinity	SU					6.96	6.95 to 7.05					
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60	20
AY25277	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25	20
AY25277	Mangenes, Dissolved	mg/L	0.00000653	0.005	0.10	0.247	0.258		0.085 to 0.115	85.9	70 to 130	4.26	20
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520	
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477	20
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70	20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27	10
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163	20

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Expiration: June 30, 2019

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 FAX (205) 257-1654

Certificate Of Analysis Alabama Power



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY25274

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	19.1	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.240	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	0.238	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 1.23	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.00722	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.00557	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	9.31	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	7.85	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	194	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			1.28	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			193	mg/L

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Expiration: June 30, 2019

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 Calera, AL 35040
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-1

Laboratory ID Number: AY25274

Sample	Analysis	Units	MB				LCS			Rec		Prec
			MB	Limit	Spike	MS	MSD	LCS	Limit	Rec	Limit	Prec
AY25376	pH for Alkalinity	SU					6.96	6.95 to 7.05				
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60 20
AY25277	Mangenes, Dissolved	mg/L	0.00000653	0.005	0.10	0.247	0.258		0.085 to 0.115	85.9	70 to 130	4.26 20
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163 20
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477 20
AY25277	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25 20
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70 20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27 10

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6 DUP

Laboratory ID Number: AY25275

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	J 0.309	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	J 0.0255	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	J 0.0251	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	U Not Detected	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.0109	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.00935	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	2.54	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	4.93	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	1.66	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0.00	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			1.66	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-6 DUP

Laboratory ID Number: AY25275

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163	20
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70	20
AY25277	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25	20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86	10
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60	20
AY25277	Mangenes, Dissolved	mg/L	0.00000653	0.005	0.10	0.247	0.258		0.085 to 0.115	85.9	70 to 130	4.26	20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05				
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520	
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
Sample Date: 22-Oct-18
Customer ID:
Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25276

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	U Not Detected	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/5/2018	SM 4500H+ B		1		4.00	5.22	SU
Alkalinity, Total as CaCO3	EMG	11/5/2018	SM 2320 B		1		0.10	U Not Detected	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/5/2018	SM 4500CO2 D		1			0	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 22-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25276

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit
			MB	Limit						Rec	Limit	
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70 20
AY25277	Manganese, Dissolved	mg/L	0.00000653	0.005	0.10	0.247	0.258		0.085 to 0.115	85.9	70 to 130	4.26 20
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163 20
AY25277	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25 20
AY25263	Alkalinity, Total as CaCO3	mg/L					208	49.2	45.0 to 55.0			1.86 10
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60 20
AY25263	pH for Alkalinity	SU						6.98	6.95 to 7.05			
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477 20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
 LBM 11/26/2018

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12 DUP

Laboratory ID Number: AY25277

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	6.34	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.0955	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	0.152	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.286	mg/L
* Manganese, Dissolved	ABB	10/26/2018	EPA 200.8		5.075	0.001	0.005	0.161	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.183	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	4.25	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	7.46	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	189	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0.51	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			188	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 23-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-12 DUP

Laboratory ID Number: AY25277

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163	20
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60	20
AY25277	Mangenes, Dissolved	mg/L	0.00000653	0.005	0.10	0.247	0.258		0.085 to 0.115	85.9	70 to 130	4.26	20
AY25376	pH for Alkalinity	SU						6.96	6.95 to 7.05				
AY25277	Mangenes, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25	20
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70	20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27	10
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520	
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY25375

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	1.20	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	0.215	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	0.221	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.228	mg/L
* Manganese, Dissolved	ABB	11/5/2018	EPA 200.8		5.075	0.001	0.005	0.541	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.579	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	17.3	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	6.26	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	50.0	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0.01	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			50.0	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-11

Laboratory ID Number: AY25375

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec
			Limit	MB					Limit	Rec	Limit	Prec	
AY25376	pH for Alkalinity	SU					6.96	6.95 to 7.05					
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60	20
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163	20
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520	
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477	20
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70	20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27	10
AY25277	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25	20
AY25378	Manganese, Dissolved	mg/L	-0.00000782	0.005	0.10	0.101	0.105		0.085 to 0.115	101	70 to 130	3.76	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY25376

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	1.79	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	J 0.221	mg/L
* Manganese, Dissolved	ABB	11/5/2018	EPA 200.8		5.075	0.001	0.005	0.0265	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	0.0251	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	2.04	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	7.31	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	243	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0.47	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			243	mg/L

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Expiration: June 30, 2019

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASG
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum - MW-10

Laboratory ID Number: AY25376

Sample	Analysis	Units	MB	MB				LCS		Rec		Prec	
				Limit	Spike	MS	MSD	LCS	Limit	Rec	Limit	Prec	Limit
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60	20
AY25376	pH for Alkalinity	SU						6.96	6.95 to 7.05				
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163	20
AY25277	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25	20
AY25378	Manganese, Dissolved	mg/L	-0.0000782	0.005	0.10	0.101	0.105		0.085 to 0.115	101	70 to 130	3.76	20
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520	
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477	20
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70	20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27	10

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25377

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	U Not Detected	mg/L
* Manganese, Dissolved	ABB	11/5/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	5.38	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	0.20	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0.00	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0.20	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGFB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Field Blank

Laboratory ID Number: AY25377

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60	20
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163	20
AY25376	pH for Alkalinity	SU						6.96	6.95 to 7.05				
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70	20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27	10
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520	
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477	20
AY25277	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25	20
AY25378	Manganese, Dissolved	mg/L	-0.00000782	0.005	0.10	0.101	0.105		0.085 to 0.115	101	70 to 130	3.76	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY25378

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Magnesium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Iron, Dissolved	RDA	11/6/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Iron, Total	RDA	11/9/2018	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Potassium, Total	ABB	10/29/2018	EPA 200.8		5.075	0.215	2.5	U Not Detected	mg/L
* Manganese, Dissolved	ABB	11/5/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Manganese, Total	ABB	10/29/2018	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Sodium, Total	RDA	11/9/2018	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
General Characteristics									
pH for Alkalinity	EMG	11/6/2018	SM 4500H+ B		1		4.00	5.39	SU
Alkalinity, Total as CaCO3	EMG	11/6/2018	SM 2320 B		1		0.10	U Not Detected	mg/L
Carbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	11/6/2018	SM 4500CO2 D		1			0	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASGEB
 Sample Date: 24-Oct-18
 Customer ID:
 Delivery Date: 24-Oct-18

Description: Gaston Gypsum Equipment Blank

Laboratory ID Number: AY25378

Sample	Analysis	Units	MB				LCS			Rec		Prec	
			MB	Limit	Spike	MS	MSD	LCS	Limit	Rec	Limit	Prec	Limit
AY25376	pH for Alkalinity	SU					6.96	6.95 to 7.05					
AY25378	Iron, Dissolved	mg/L	-0.000781	0.022	0.2	0.197	0.203	0.199	0.17 to 0.23	98.7	70 to 130	2.60	20
AY25378	Magnesium, Total	mg/L	-0.0127	0.22	5.00	4.86	4.85	4.82	4.25 to 5.75	97.2	70 to 130	0.163	20
AY25378	Iron, Total	mg/L	-0.000677	0.022	0.2	0.197	0.197	0.200	0.17 to 0.23	98.3	70 to 130	0.0030520	
AY25378	Sodium, Total	mg/L	-0.00185	0.22	5.00	4.98	5.00	5.04	4.25 to 5.75	99.6	70 to 130	0.477	20
AY25277	Potassium, Total	mg/L	0.00815	0.0946	10.0	10.7	11.1	10.2	8.5 to 11.5	104	70 to 130	3.70	20
AY25376	Alkalinity, Total as CaCO3	mg/L					239	49.2	45.0 to 55.0			1.27	10
AY25277	Manganese, Total	mg/L	-0.000271	0.0022	0.10	0.285	0.279	0.100	0.085 to 0.115	102	70 to 130	2.25	20
AY25378	Manganese, Dissolved	mg/L	-0.00000782	0.005	0.10	0.101	0.105		0.085 to 0.115	101	70 to 130	3.76	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
 LBM 11/26/2018

Definitions



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

Qualifier	Description
B	Analyte found in reagent blank. Indicates possible reagent or background contamination.
E	Estimated reported value exceeded calibration range.
J	Reported value is an estimate because concentration is less than reporting limit.
N	Organic constituents tentatively identified. Confirmation is needed.
R	Matrix spike recovery is out of range.
U	Compound was analyzed, but not detected.
P	Precision is out of range.
C	Analyte was verified by re-analysis.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.
L	Check standard is outside of the required specification limit.
D	All samples were stored at less than or equal to 6 °C and for no longer than 48 hours from time of sampling, unless otherwise noted.
F	Water Field Group (WFG) qualifier; see comments for more information



Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA **10/23/2018 17:40**

Requested Complete Date Site Representative Collector	Routine	Results To	Dustin Brooks, Greg Dyer
	Tanisha Fenderson	Requested By	Greg Dyer
	Anthony Goggins	Location	Gaston Gypsum

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

Comments: Relinquished to secure location Biology Shipping Lab GSC Building 8

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	10/22/18	09:57	3	Groundwater		AY25263
MW-6	10/22/2018	10:56	3	Groundwater		AY25264
MW-7	10/22/2018	12:17	3	Groundwater		AY25265
MW-8	10/22/2018	13:50	3	Groundwater		AY25266
MW-9	10/22/2018	15:10	3	Groundwater		AY25267
MW-2	10/22/2018	17:08	3	Groundwater		AY25268
MW-15	10/23/2018	09:11	3	Groundwater		AY25269
MW-3	10/23/2018	10:50	3	Groundwater		AY25270
MW-14S	10/23/2018	11:56	3	Groundwater		AY25271
MW-12	10/23/2018	12:53	3	Groundwater		AY25272
MW-13	10/23/2018	13:52	3	Groundwater		AY25273
MW-1	10/23/2018	14:45	3	Groundwater		AY25274
MW-6DUP	10/22/2018	10:56	3	Sample Duplicate		AY25275
FB-1	10/22/2018	16:40	3	Field Blank		AY25276
MW-12DUP	10/23/2018	12:53	3	Sample Duplicate		AY25277

Relinquished By	Received By	Date/Time
	Laura Midkiff <small>Digitally signed by Laura Midkiff DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lmidkiff@southernco.com, c=US Date: 2018.10.24 07:34:28 -05'00'</small>	10/24/2018 07:34

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	
Sample Event	1177	
Cooler Temp	0.3 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	6959-37696-30-17	



Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete

Outside Lab

Lab Complete

Lab ETA 10/24/2018 15:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer		
	Site Representative		Tanisha Fenderson	Requested By	Greg Dyer
	Collector		Nick Pitts		Location

Bottles	1	Metals	500 mL	3	Alkalinity	250 mL	5	N/A	N/A	7	N/A	N/A
	2	Dissolved Meta	500 mL	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-11	10/24/18	11:28	3	Groundwater		AY25375
MW-10	10/24/2018	13:05	3	Groundwater		AY25376
FB-2	10/24/2018	11:50	3	Field Blank		AY25377
EB-1	10/24/2018	13:40	3	Equipment Blank		AY25378

Relinquished By	Received By	Date/Time
		10/24/2018 15:56

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/> Cooler Temp 0.3 degrees C Thermometer ID 5408-27568-2-2 pH Strip ID 6959-37696-30-17
Turbidity ID	3901-20009-2-1	
Sample Event	1177	

Appendix B

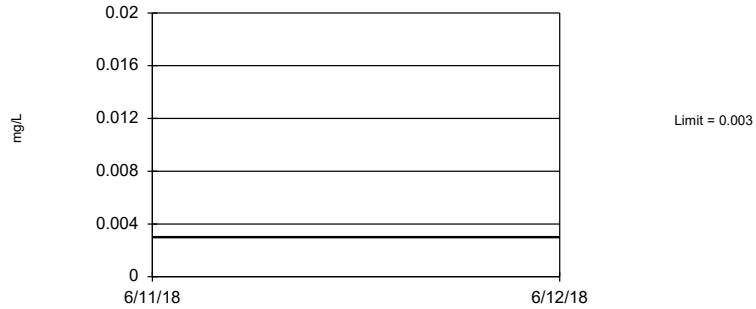
1st Semi-Annual

Upper Tolerance Limits - App IV

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/14/2019, 9:26 AM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	40	n/a	n/a	95	n/a	n/a	0.1285	NP Inter(NDs)
Arsenic (mg/L)	0.005	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Barium (mg/L)	0.06031	40	0.02996	0.01428	0	None	No	0.05	Inter
Beryllium (mg/L)	0.003	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Boron (mg/L)	0.1	40	n/a	n/a	97.5	n/a	n/a	0.1285	NP Inter(NDs)
Cadmium (mg/L)	0.001	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Chromium (mg/L)	0.01	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Cobalt (mg/L)	0.01	40	n/a	n/a	95	n/a	n/a	0.1285	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.6	40	n/a	n/a	5	n/a	n/a	0.1285	NP Inter(normal...)
Fluoride (mg/L)	0.3	44	n/a	n/a	29.55	n/a	n/a	0.1047	NP Inter(normal...)
Lead (mg/L)	0.005	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Lithium (mg/L)	0.05	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Mercury (mg/L)	0.0005	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Molybdenum (mg/L)	0.01	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Selenium (mg/L)	0.01	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Thallium (mg/L)	0.001	40	n/a	n/a	97.5	n/a	n/a	0.1285	NP Inter(NDs)

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 40 background values. 95% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Antimony Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

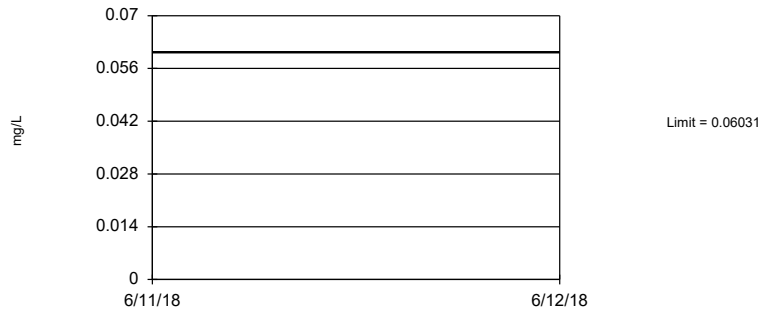
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Arsenic Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

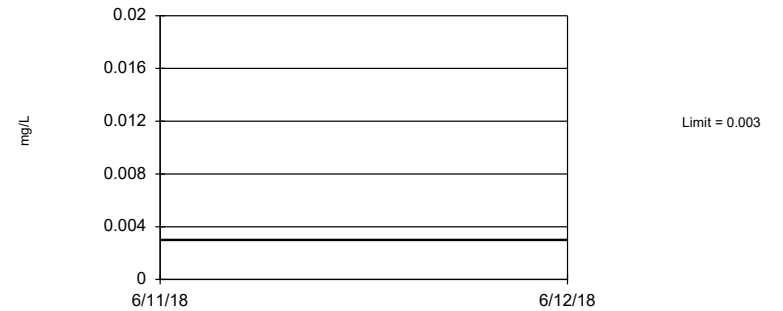
Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary: Mean=0.02996, Std. Dev.=0.01428, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9196, critical = 0.919. Report alpha = 0.05.

Constituent: Barium Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

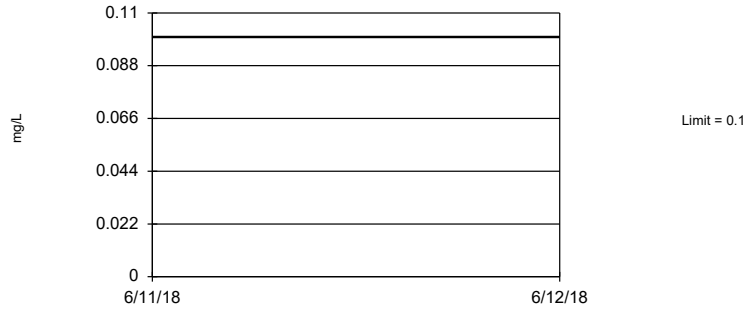
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Beryllium Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

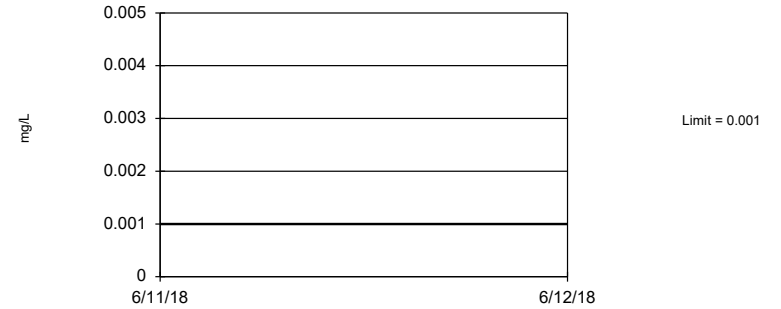
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 40 background values. 97.5% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Boron Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

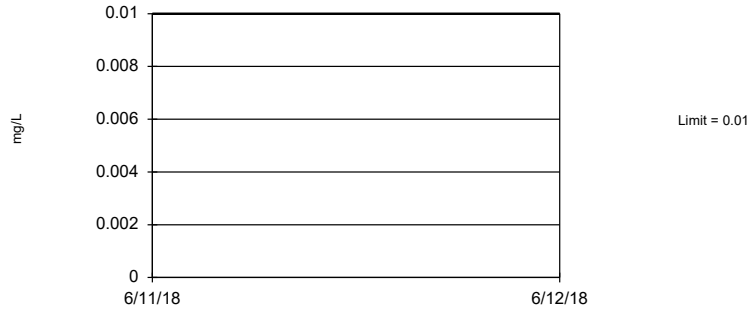
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Cadmium Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Chromium Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 40 background values. 95% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Cobalt Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

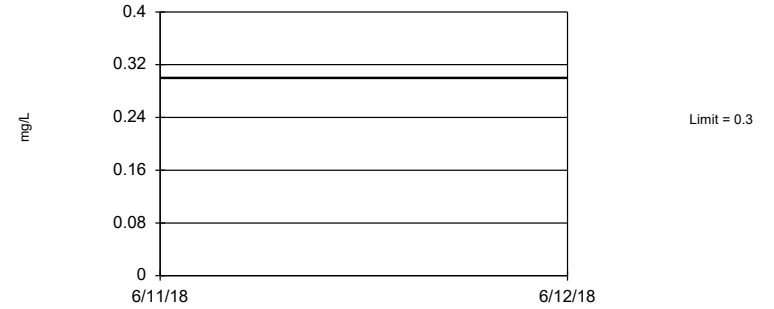
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 5% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Combined Radium 226 + 228 Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 29.55% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Fluoride Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

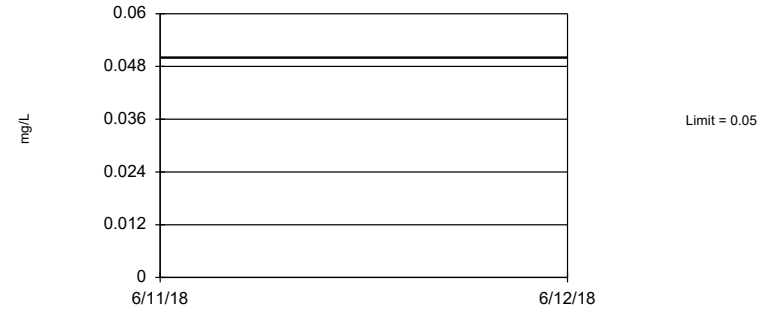
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Lead Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

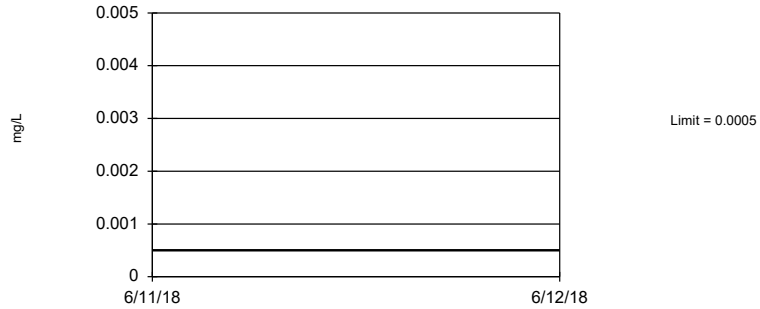
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Lithium Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Mercury Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Molybdenum Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Selenium Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 40 background values. 97.5% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Thallium Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Confidence Intervals - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:33 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GN-GSA-MW-1	0.02573	0.01087	0.01	Yes	7	0	No	0.01	Param.

Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:33 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.0015	0.000629	0.006	No	10	60	No	0.011	NP (normality)
Antimony (mg/L)	GN-GSA-MW-5	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-11	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.02573	0.01087	0.01	Yes	7	0	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-5	0.0025	0.00119	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-6	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-8	0.00162	0.00112	0.01	No	10	10	No	0.011	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-9	0.0025	0.00101	0.01	No	10	80	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-10	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-12	0.0025	0.00102	0.01	No	10	20	No	0.011	NP (Cohens/xfrm)
Arsenic (mg/L)	GN-GSA-MW-13	0.0025	0.0011	0.01	No	10	50	No	0.011	NP (normality)
Barium (mg/L)	GN-GSA-MW-1	1.924	1.512	2	No	10	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GN-GSA-MW-5	0.04553	0.03411	2	No	10	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GN-GSA-MW-6	0.01611	0.01395	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-7	0.02145	0.01883	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-8	0.03156	0.02532	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-9	0.03049	0.02245	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-10	0.03626	0.03244	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.009051	0.006197	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-12	0.02369	0.01953	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.05498	0.04514	2	No	10	0	No	0.01	Param.
Beryllium (mg/L)	GN-GSA-MW-1	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-5	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-6	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-7	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-8	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-9	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-10	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-11	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-12	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-13	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-1	0.03477	0.02995	4	No	10	0	No	0.01	Param.
Boron (mg/L)	GN-GSA-MW-5	0.05	0.022	4	No	10	80	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-6	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-7	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-8	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-9	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-10	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-11	0.0362	0.0295	4	No	10	0	No	0.011	NP (normality)
Boron (mg/L)	GN-GSA-MW-12	0.03588	0.02952	4	No	10	0	No	0.01	Param.
Boron (mg/L)	GN-GSA-MW-13	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-5	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-9	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)

Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:33 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	GN-GSA-MW-12	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-1	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.005	0.00274	0.01	No	10	30	No	0.011	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-6	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-7	0.01017	0.003095	0.01	No	10	30	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-8	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-9	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-10	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.006162	0.002652	0.01	No	10	0	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-12	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-13	0.01159	0.004651	0.01	No	10	40	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.206	0.7692	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	0.8718	0.1009	5	No	10	10	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	0.9984	0.03359	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.8456	0.0362	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.368	-0.0526	5	No	10	10	No	0.011	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	1.029	0.2135	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	0.8933	0.04601	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.289	-0.02995	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	0.9233	0.1044	5	No	10	10	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	0.8321	-0.03163	5	No	10	10	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-1	0.3525	0.2879	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-5	0.1	0.028	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-6	0.15	0.036	4	No	11	54.55	No	0.006	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-7	0.1066	0.07434	4	No	11	9.091	ln(x)	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1613	0.1158	4	No	11	0	x^2	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.1	0.035	4	No	11	18.18	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-10	0.1	0.02	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-11	0.3343	0.03871	4	No	11	36.36	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-12	0.095	0.05	4	No	11	9.091	No	0.006	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.085	0.039	4	No	11	0	No	0.006	NP (normality)
Lead (mg/L)	GN-GSA-MW-1	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-5	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-7	0.0025	0.00229	0.015	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-8	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-9	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-10	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-11	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-12	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-5	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-6	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-7	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-8	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-9	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-10	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-11	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-12	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-13	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-1	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-5	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-6	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-7	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-8	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-9	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-10	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-11	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-12	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-13	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-1	0.01852	0.007824	0.1	No	10	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-5	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-6	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-7	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-8	0.00446	0.003358	0.1	No	10	0	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)

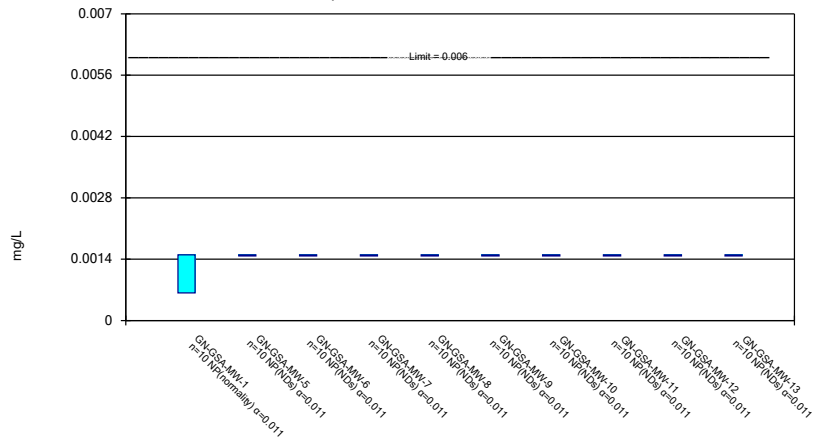
Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:33 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	GN-GSA-MW-10	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-11	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-12	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-13	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-1	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-5	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-6	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-7	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-8	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-9	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-10	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-11	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-12	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-13	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)

Non-Parametric Confidence Interval

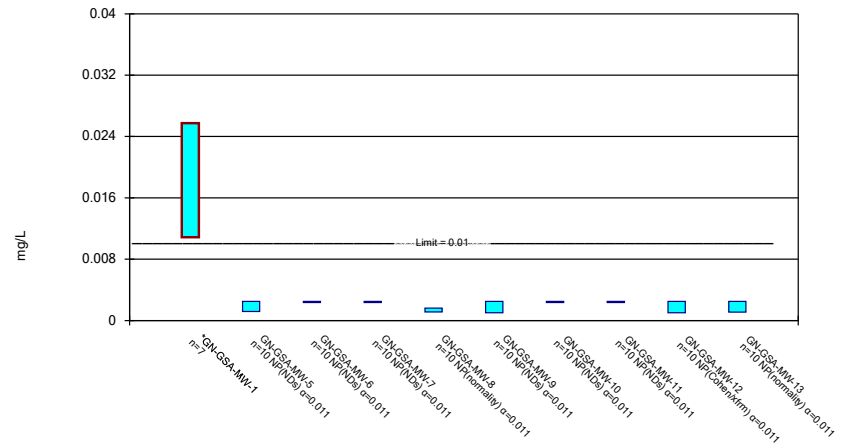
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

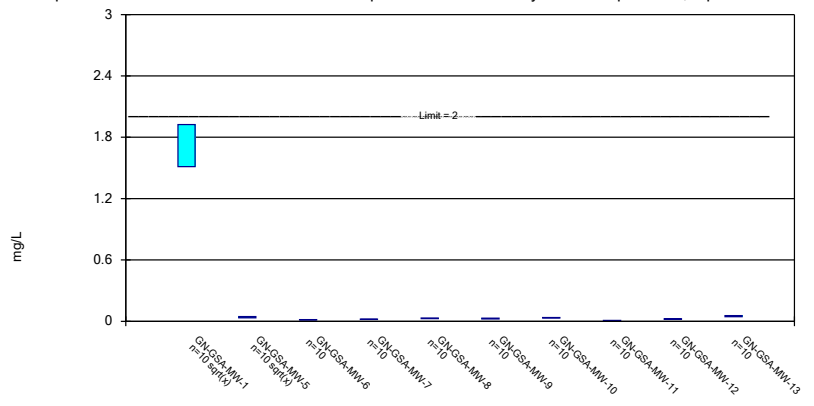
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric Confidence Interval

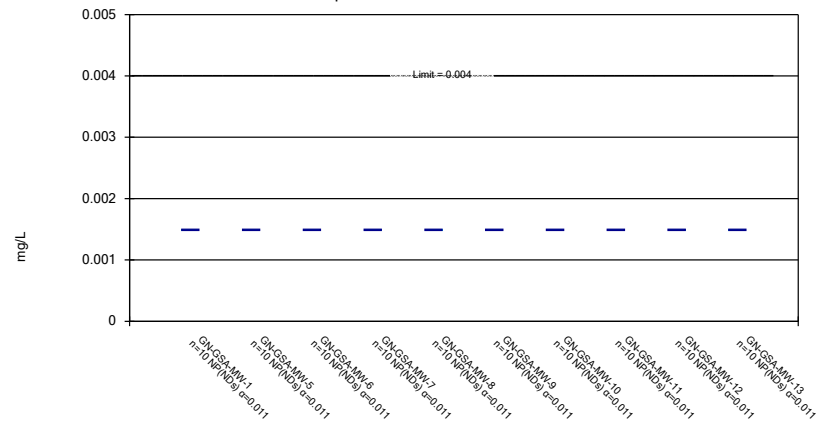
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Constituent: Barium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

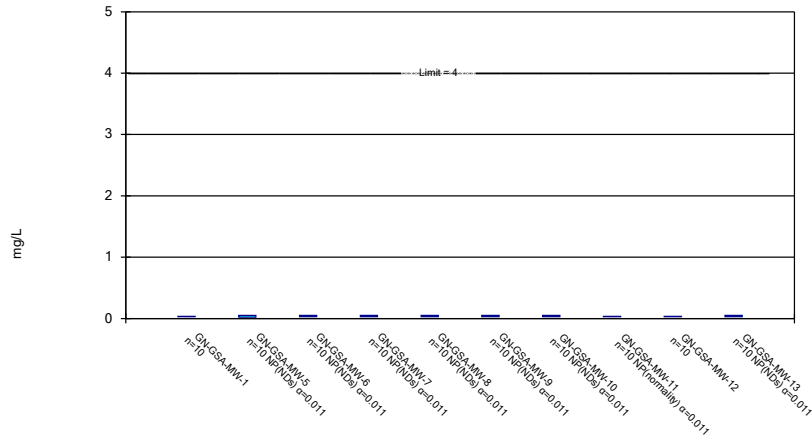
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

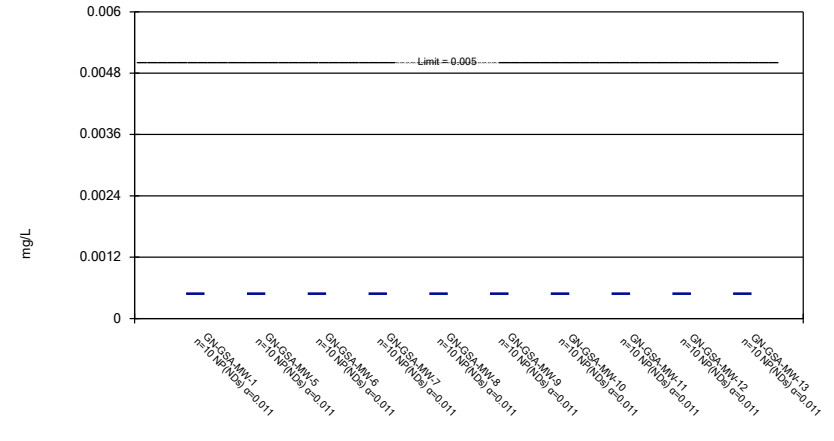
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Boron Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

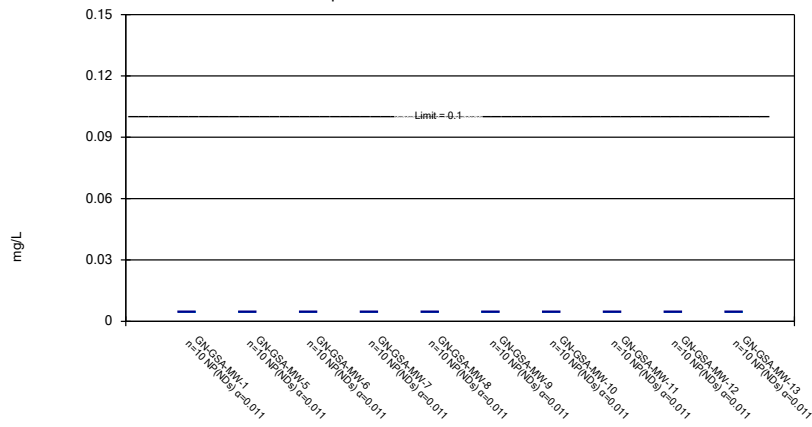
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

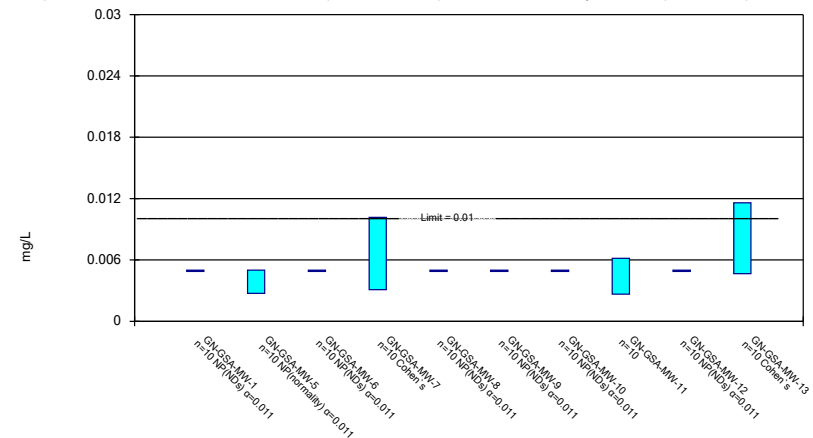
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

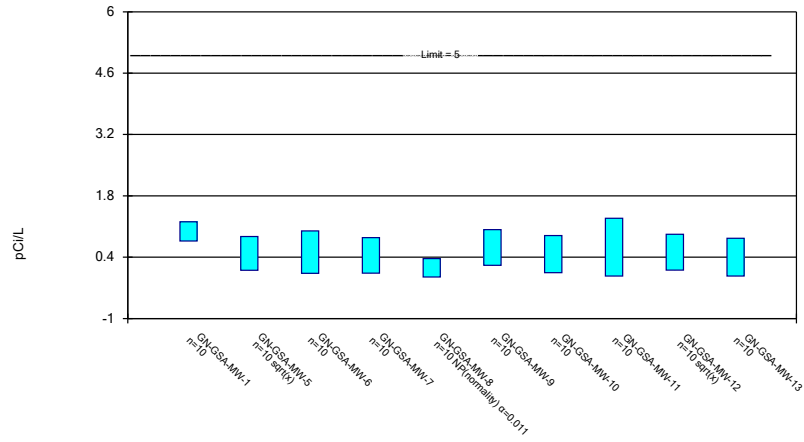
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

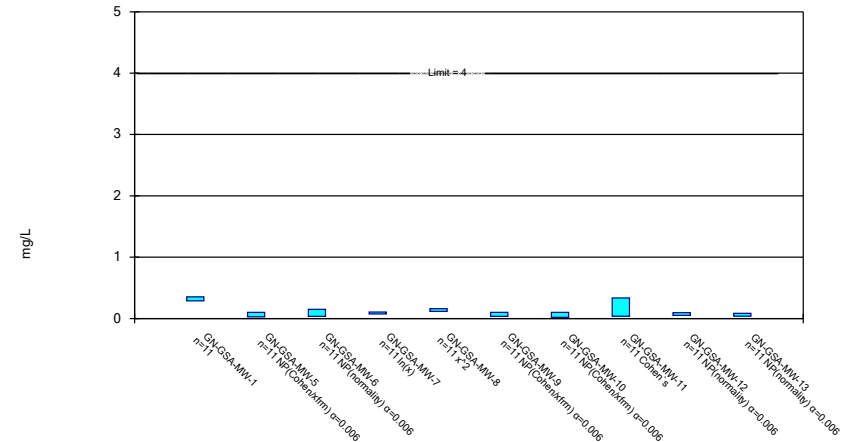
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

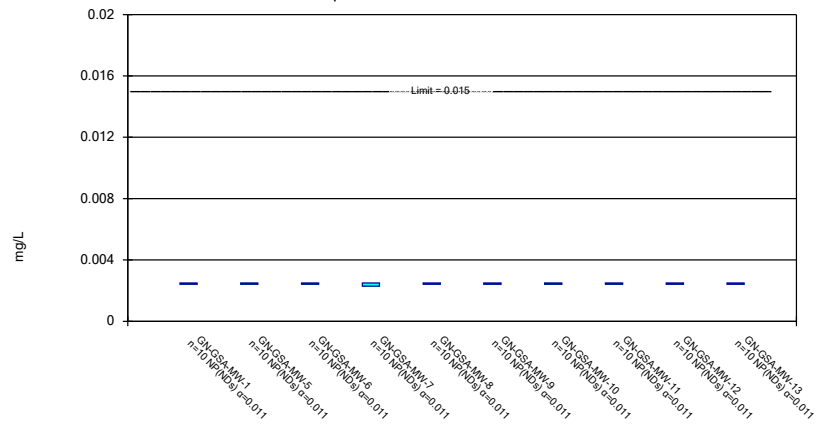
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

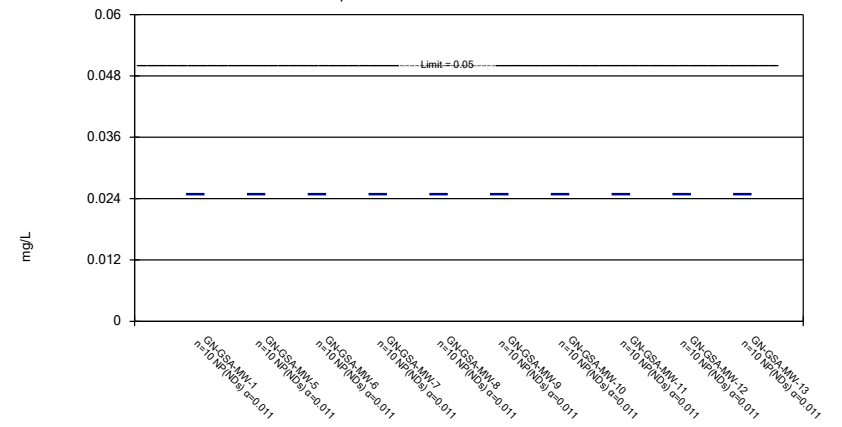
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

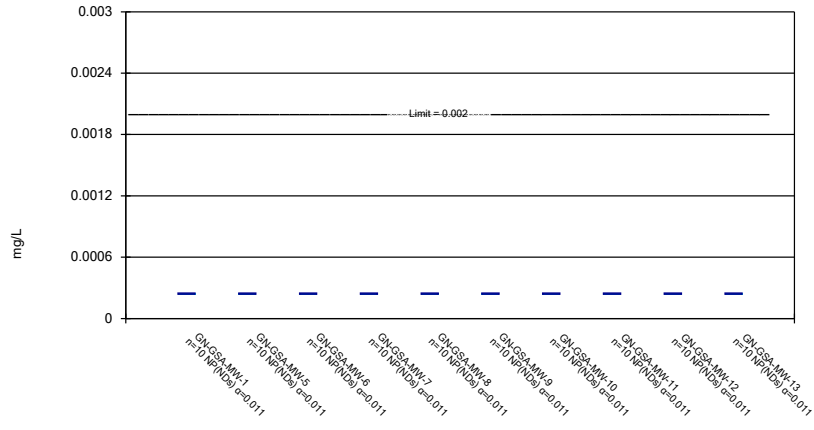
Compliance Limit is not exceeded.



Constituent: Lithium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

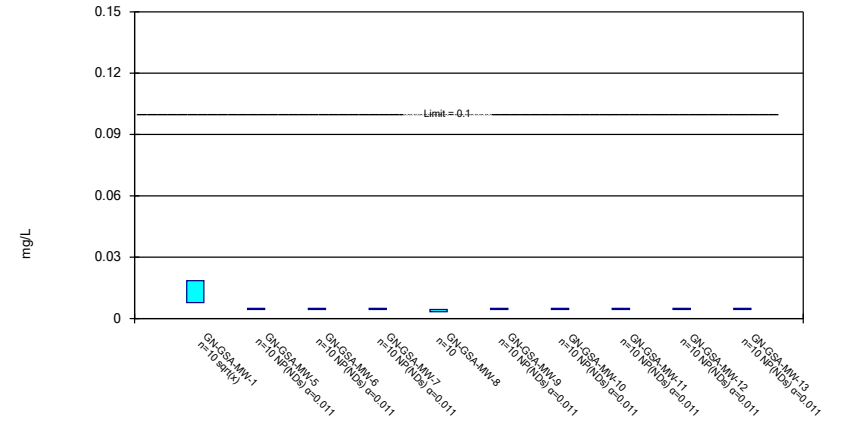
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

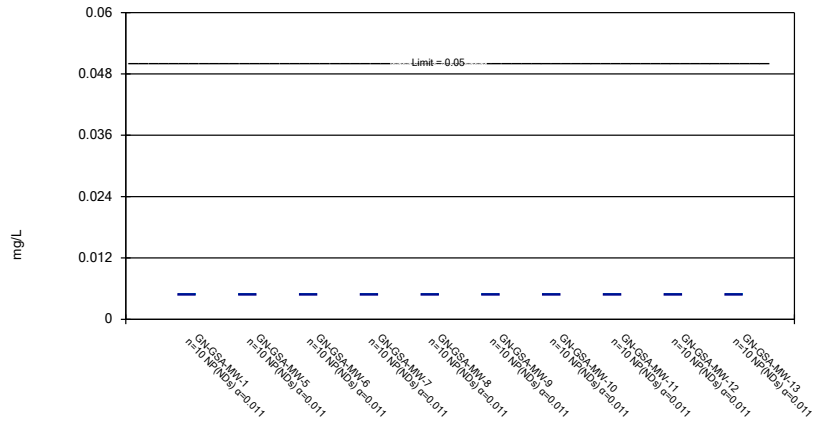
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

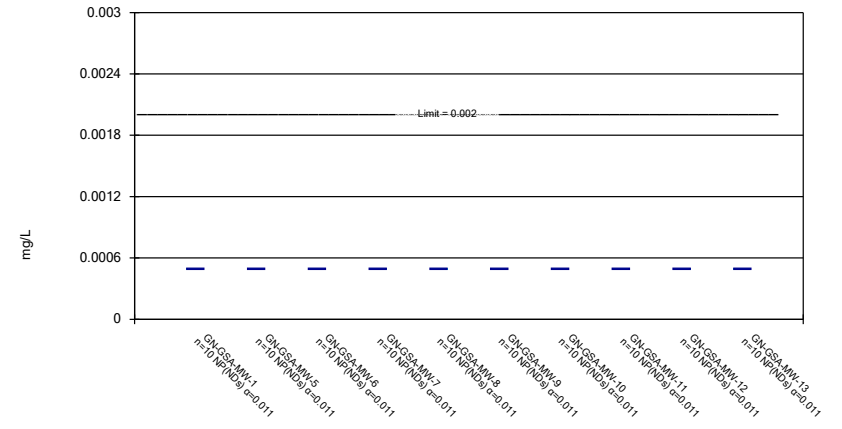
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

2nd Semi-Annual

Interwell Prediction Limit Summary Table - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 1:38 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDsND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	GN-GSA-MW-1	0.111	n/a	10/23/2018	0.39	Yes	48	n/a	n/a	35.42	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-8	0.111	n/a	10/22/2018	0.15	Yes	48	n/a	n/a	35.42	n/a	0.0008027	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-1	7.53	5.84	10/23/2018	7.65	Yes	48	n/a	n/a	0	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-6	7.53	5.84	10/22/2018	4.68	Yes	48	n/a	n/a	0	n/a	0.001605	NP Inter (normality) 1 of 2

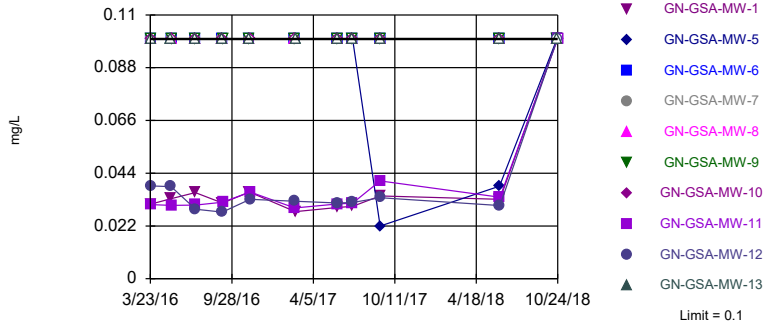
Interwell Prediction Limit Summary Table - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 1:38 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Boron (mg/L)	GN-GSA-MW-1	0.1	n/a	10/23/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-5	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-6	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-7	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-8	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-9	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-10	0.1	n/a	10/24/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-11	0.1	n/a	10/24/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-12	0.1	n/a	10/23/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-13	0.1	n/a	10/23/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-1	0.111	n/a	10/23/2018	0.39	Yes	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-5	0.111	n/a	10/22/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-6	0.111	n/a	10/22/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-7	0.111	n/a	10/22/2018	0.1	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-8	0.111	n/a	10/22/2018	0.15	Yes	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-9	0.111	n/a	10/22/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-10	0.111	n/a	10/24/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-11	0.111	n/a	10/24/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-12	0.111	n/a	10/23/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-13	0.111	n/a	10/23/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-1	7.53	5.84	10/23/2018	7.65	Yes	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-5	7.53	5.84	10/22/2018	6.48	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-6	7.53	5.84	10/22/2018	4.68	Yes	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-7	7.53	5.84	10/22/2018	6.71	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-8	7.53	5.84	10/22/2018	7.33	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-9	7.53	5.84	10/22/2018	6.86	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-10	7.53	5.84	10/24/2018	7.14	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-11	7.53	5.84	10/24/2018	6.09	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-12	7.53	5.84	10/23/2018	7.22	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-13	7.53	5.84	10/23/2018	7.09	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

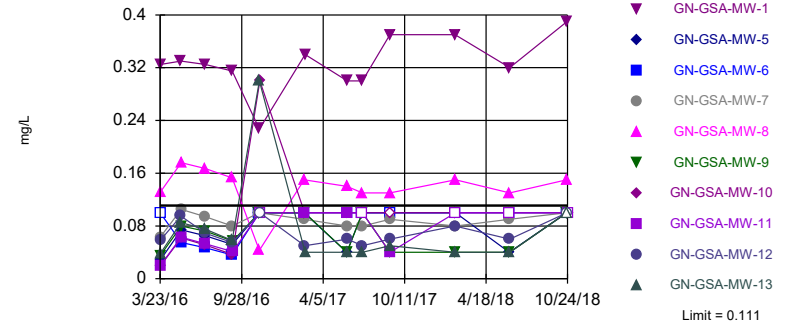


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 97.73% NDs. Annual per-constituent alpha = 0.02075. Individual comparison alpha = 0.0009524 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

Constituent: Boron Analysis Run 12/18/2018 1:35 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit: GN-GSA-MW-1, GN-GSA-MW-8

Prediction Limit
Interwell Non-parametric

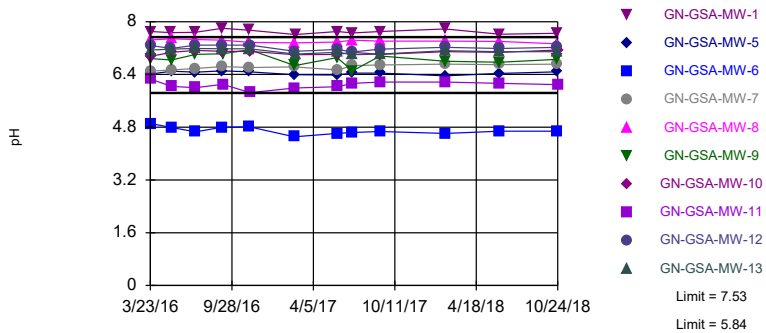


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. 35.42% NDs. Annual per-constituent alpha = 0.01751. Individual comparison alpha = 0.0008027 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

Constituent: Fluoride Analysis Run 12/18/2018 1:35 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limits: GN-GSA-MW-1, GN-GSA-MW-6

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 48 background values. Annual per-constituent alpha = 0.03502. Individual comparison alpha = 0.001605 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

Constituent: pH Analysis Run 12/18/2018 1:35 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-9	GN-GSA-MW-7	GN-GSA-MW-11	GN-GSA-MW-6	GN-GSA-MW-12	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-1
3/23/2016	<0.1	<0.1	<0.1	0.0309 (J)	<0.1	0.0387 (J)	<0.1	<0.1	
3/24/2016									0.0311 (J)
5/10/2016	<0.1					0.0384 (J)	<0.1		0.0334 (J)
5/11/2016		<0.1	<0.1	0.0306 (J)	<0.1			<0.1	
7/5/2016	<0.1								0.0359 (J)
7/6/2016		<0.1	<0.1	0.0307 (J)	<0.1	0.029 (J)	<0.1	<0.1	
8/23/2016									
9/6/2016	<0.1		<0.1		<0.1	0.0278 (J)		<0.1	0.0316 (J)
9/7/2016		<0.1		0.0319 (J)			<0.1		
11/8/2016	<0.1	<0.1	<0.1		<0.1		<0.1	<0.1	0.0361 (J)
11/9/2016				0.0362 (J)		0.0331 (J)			
1/3/2017									
2/20/2017			<0.1		<0.1		<0.1	<0.1	
2/21/2017	<0.1	<0.1		0.0295 (J)		0.0323 (J)			
2/22/2017									0.028 (J)
5/30/2017		<0.1			<0.1			<0.1	
5/31/2017	<0.1		<0.1	0.0312 (J)		0.0316 (J)	<0.1		0.0297 (J)
7/5/2017	<0.1	<0.1	<0.1	0.0315 (J)	<0.1	0.0318 (J)	<0.1	<0.1	0.0302 (J)
9/5/2017	<0.1						<0.1		
9/7/2017		<0.1	<0.1	0.0408 (J)	<0.1	0.0338 (J)		0.022 (J)	0.0345 (J)
6/11/2018			<0.1		<0.1			0.0386 (J)	
6/12/2018	<0.1	<0.1		0.034 (J)		0.0305 (J)	<0.1		0.0331 (J)
10/22/2018	<0.1	<0.1	<0.1		<0.1			<0.1 (J)	
10/23/2018						<0.1 (J)	<0.1		<0.1 (J)
10/24/2018				<0.1 (J)					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-10	GN-GSA-MW-13	GN-GSA-MW-14S...GN-GSA-MW-15 ...	
3/23/2016					
3/24/2016	<0.1	<0.1	<0.1		
5/10/2016			<0.1		
5/11/2016	<0.1	<0.1			
7/5/2016				<0.1	
7/6/2016	<0.1	<0.1	<0.1		<0.1
8/23/2016				<0.1	<0.1
9/6/2016	<0.1	<0.1	<0.1		
9/7/2016				<0.1	<0.1
11/8/2016	<0.1		<0.1	<0.1	<0.1
11/9/2016		<0.1			
1/3/2017				0.0211 (J)	<0.1
2/20/2017	<0.1				<0.1
2/21/2017		<0.1		<0.1	
2/22/2017			<0.1		
5/30/2017	<0.1				
5/31/2017		<0.1	<0.1	<0.1	<0.1
7/5/2017	<0.1	<0.1	<0.1	<0.1	<0.1
9/5/2017				<0.1	<0.1
9/7/2017	<0.1	<0.1	<0.1		
6/11/2018					
6/12/2018	<0.1	<0.1	<0.1	<0.1	<0.1
10/22/2018	<0.1				
10/23/2018			<0.1	<0.1	<0.1
10/24/2018		<0.1			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-3 (bg)	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-9	GN-GSA-MW-5	GN-GSA-MW-8
3/23/2016	0.022 (J)	<0.1	0.063 (J)	0.06 (J)	0.02 (J)	0.058 (J)	0.035 (J)	0.028 (J)	
3/24/2016									0.132 (J)
5/10/2016	0.068 (J)			0.111 (J)		0.095 (J)			
5/11/2016		0.055 (J)	0.105 (J)		0.063 (J)		0.08 (J)	0.074 (J)	0.176 (J)
7/5/2016	0.052 (J)								
7/6/2016		0.047 (J)	0.094 (J)	0.089 (J)	0.053 (J)	0.069 (J)	0.072 (J)	0.065 (J)	0.167 (J)
8/23/2016									
9/6/2016	0.038 (J)	0.036 (J)	0.08 (J)			0.055 (J)		0.052 (J)	0.153 (J)
9/7/2016				0.073 (J)	0.041 (J)		0.057 (J)		
11/8/2016	<0.1	<0.1	<0.1	<0.1			<0.1	<0.1	0.043 (J)
11/9/2016					<0.1	<0.1			
1/3/2017									
2/20/2017		0.1	0.09 (J)	0.05 (J)				0.1	0.15
2/21/2017	0.1				0.1	0.05 (J)	0.1		
2/22/2017									
5/30/2017		0.1					0.04 (J)	0.04 (J)	0.14
5/31/2017	0.1		0.08 (J)	0.06 (J)	0.1	0.06 (J)			
7/5/2017	<0.1	<0.1	0.08 (J)	0.05 (J)	<0.1	0.05 (J)	<0.1	<0.1	0.13
9/5/2017	<0.1			0.06 (J)					
9/7/2017		<0.1	0.09 (J)		0.04 (J)	0.06 (J)	0.04 (J)	<0.1	0.13
2/5/2018	0.04 (J)					0.08 (J)			
2/6/2018		<0.1	0.08 (J)	0.06 (J)	<0.1		0.04 (J)	<0.1	0.15
2/7/2018									
6/11/2018		<0.1	0.09 (J)					0.04 (J)	
6/12/2018	<0.1			0.05 (J)	<0.1	0.06 (J)	0.04 (J)		0.13
10/22/2018	<0.1	<0.1	0.1				<0.1 (J)	<0.1 (J)	0.15
10/23/2018				<0.1 (J)		<0.1 (J)			
10/24/2018					<0.1				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-13	GN-GSA-MW-1	GN-GSA-MW-14S...	GN-GSA-MW-15 ...
3/23/2016					
3/24/2016	0.02 (J)	0.039 (J)	0.325		
5/10/2016		0.085 (J)	0.33		
5/11/2016	0.062 (J)				
7/5/2016			0.325	0.072 (J)	
7/6/2016	0.051 (J)	0.075 (J)			0.062 (J)
8/23/2016				0.066 (J)	0.045 (J)
9/6/2016	0.037 (J)	0.058 (J)	0.315		
9/7/2016				0.062 (J)	0.042 (J)
11/8/2016		0.3 (U)	0.227 (J)	<0.1	<0.1
11/9/2016	0.3 (U)				
1/3/2017				<0.1	<0.1
2/20/2017					0.1
2/21/2017	0.1			0.1	
2/22/2017		0.04 (J)	0.34		
5/30/2017					
5/31/2017	0.1	0.04 (J)	0.3	0.06 (J)	0.1
7/5/2017	<0.1	0.04 (J)	0.3	0.04 (J)	<0.1
9/5/2017				0.06 (J)	<0.1
9/7/2017	<0.1	0.05 (J)	0.37		
2/5/2018		0.04 (J)	0.37		
2/6/2018	<0.1			0.06 (J)	
2/7/2018					<0.1
6/11/2018					
6/12/2018	<0.1	0.04 (J)	0.32	0.05 (J)	<0.1
10/22/2018					
10/23/2018		<0.1 (J)	0.39	<0.1 (J)	<0.1
10/24/2018	<0.1				

Prediction Limit

Constituent: pH (pH) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-3 (bg)	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-9	GN-GSA-MW-5	GN-GSA-MW-8
3/23/2016	7.18	4.91	6.5	6.83	6.26	7.28	6.88	6.41	
3/24/2016									7.45
5/10/2016	7.2			6.84		7.19			
5/11/2016		4.79	6.54		6.04		6.84	6.5	7.48
7/5/2016	7.15								
7/6/2016		4.66	6.58	6.94	6	7.29	7.01	6.47	7.46
8/23/2016									
9/6/2016	7.17	4.8	6.64			7.29		6.51	7.44
9/7/2016				6.84	6.1		7.03		
11/8/2016	7.12	4.81	6.61	6.84			7.15	6.48	7.37
11/9/2016					5.85	7.29			
1/3/2017									
2/20/2017		4.51	6.63	7.04				6.39	7.36
2/21/2017	7.12				5.99	7.1	6.67		
2/22/2017									
5/30/2017		4.61					6.91	6.38	7.38
5/31/2017	7.17		6.54	6.91	6.03	7.16			
7/5/2017	7.18	4.64	6.67	7.02	6.13	7.08	6.51	6.44	7.44
9/5/2017	7.17			6.78					
9/7/2017		4.67	6.69		6.17	7.17	6.96	6.44	7.41
2/5/2018	7.12					7.22			
2/6/2018		4.61	6.71	6.96	6.17		6.8	6.36	7.41
2/7/2018									
6/11/2018		4.68	6.7					6.43	
6/12/2018	7.19			6.76	6.13	7.19	6.77		7.4
10/22/2018	7.06	4.68	6.71				6.86	6.48	7.33
10/23/2018				6.59		7.22			
10/24/2018					6.09				

Prediction Limit

Constituent: pH (pH) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-13	GN-GSA-MW-1	GN-GSA-MW-14S...	GN-GSA-MW-15 ...
3/23/2016					
3/24/2016	6.95	7.14	7.7		
5/10/2016		7.17	7.67		
5/11/2016	7.07				
7/5/2016			7.68	7.44	
7/6/2016	7.13	7.19			6.1
8/23/2016				7.47	5.87
9/6/2016	7.1	7.18	7.8		
9/7/2016				7.51	5.92
11/8/2016		7.18	7.74	7.37	5.91
11/9/2016	7.1				
1/3/2017				7.37	5.93
2/20/2017					5.91
2/21/2017	7			7.41	
2/22/2017		7.02	7.61		
5/30/2017					
5/31/2017	7.01	7.07	7.7	7.47	6
7/5/2017	7.07	7	7.66	7.5	6
9/5/2017				7.39	5.9
9/7/2017	7.01	7.02	7.7		
2/5/2018		7.12	7.78		
2/6/2018	7.09			7.47	
2/7/2018					5.86
6/11/2018					
6/12/2018	7.07	7.09	7.62	7.53	6.05
10/22/2018					
10/23/2018		7.09	7.65	7.4	5.84
10/24/2018	7.14				

Intrawell Prediction Limit Summary Table - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:05 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDsND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GN-GSA-MW-1	38.37	n/a	10/23/2018	38.9	Yes	9	35.73	1.237	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-10	99.41	n/a	10/24/2018	104	Yes	9	92.19	3.387	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-13	96.63	n/a	10/23/2018	97.6	Yes	9	83.12	6.337	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-2	87.97	n/a	10/22/2018	96.9	Yes	9	79.02	4.196	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-11	6.745	n/a	10/24/2018	7.2	Yes	9	4.269	1.162	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-5	31.02	n/a	10/22/2018	40	Yes	9	15.51	7.278	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-5	269.4	n/a	10/22/2018	292	Yes	9	203.3	30.98	0	None	No	0.0006839 Param 1 of 3

Intrawell Prediction Limit Summary Table - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:05 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-1	38.37	n/a	10/23/2018	38.9	Yes	9	35.73	1.237	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-10	99.41	n/a	10/24/2018	104	Yes	9	92.19	3.387	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-11	15.57	n/a	10/24/2018	7.73	No	9	10.82	2.23	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-12	75.87	n/a	10/23/2018	64.3	No	9	66.13	4.568	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-13	96.63	n/a	10/23/2018	97.6	Yes	9	83.12	6.337	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-14S	56.07	n/a	10/23/2018	44.4	No	9	49.4	3.13	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-15	10.8	n/a	10/23/2018	5.94	No	9	8.347	1.15	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-2	87.97	n/a	10/22/2018	96.9	Yes	9	79.02	4.196	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-3	114.2	n/a	10/23/2018	68.8	No	9	96.47	8.312	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-5	65.71	n/a	10/22/2018	60.6	No	9	52.77	6.075	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-6	1.54	n/a	10/22/2018	0.79	No	9	1.013	0.2472	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-7	72.45	n/a	10/22/2018	70.3	No	9	63.62	4.141	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-8	61.65	n/a	10/22/2018	55.4	No	9	56.57	2.387	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-9	67.03	n/a	10/22/2018	52.4	No	9	50.08	7.955	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-1	4.011	n/a	10/23/2018	2.1	No	9	2.554	0.6834	11.11	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-10	4.197	n/a	10/24/2018	2.9	No	9	2.646	0.7282	11.11	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-11	6.745	n/a	10/24/2018	7.2	Yes	9	4.269	1.162	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-12	5.623	n/a	10/23/2018	2.1	No	9	3.181	1.146	11.11	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-13	5.021	n/a	10/23/2018	3.5	No	9	3.646	0.6455	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-14S	5.523	n/a	10/23/2018	3.4	No	9	4.387	0.5333	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-15	4.666	n/a	10/23/2018	1ND	No	9	2.783	0.8834	11.11	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-2	4.891	n/a	10/22/2018	3.6	No	9	3.738	0.5409	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-3	3.86	n/a	10/23/2018	2.6	No	9	3.14	0.3379	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-5	17	n/a	10/22/2018	14	No	9	n/a	n/a	0	n/a	n/a	0.004675 NP (normality) 1 of 3
Chloride (mg/L)	GN-GSA-MW-6	4.015	n/a	10/22/2018	2.6	No	9	8.785	3.44	11.11	None	x^2	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-7	4.538	n/a	10/22/2018	3.7	No	9	3.468	0.502	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-8	2.587	n/a	10/22/2018	1ND	No	9	1.769	0.3837	11.11	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-9	3.528	n/a	10/22/2018	2	No	9	2.32	0.567	11.11	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-1	6.414	n/a	10/23/2018	2.5ND	No	9	4.099	1.086	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-10	2.582	n/a	10/24/2018	2.5ND	No	9	1.887	0.326	11.11	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-11	15.03	n/a	10/24/2018	2.5ND	No	9	7.499	3.536	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-12	16.55	n/a	10/23/2018	2.5ND	No	9	9.349	3.38	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-13	10.47	n/a	10/23/2018	6.7	No	9	8.328	1.007	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-14S	18.04	n/a	10/23/2018	5.4	No	9	9.944	3.798	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-15	5.604	n/a	10/23/2018	2.5ND	No	9	3.231	1.113	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-2	10.62	n/a	10/22/2018	8.3	No	9	7.103	1.648	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-3	35.15	n/a	10/23/2018	12	No	9	20.38	6.93	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-5	31.02	n/a	10/22/2018	40	Yes	9	15.51	7.278	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-6	4.369	n/a	10/22/2018	2.5ND	No	9	1.754	1.227	22.22	Kaplan-Meier	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-7	14.51	n/a	10/22/2018	8.8	No	9	10.79	1.745	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-8	2.629	n/a	10/22/2018	2.5ND	No	9	1.843	0.3686	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-9	6.386	n/a	10/22/2018	5.1	No	9	5.261	0.528	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-1	242.9	n/a	10/23/2018	195	No	9	198.4	20.85	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-10	267.8	n/a	10/24/2018	265	No	9	251.8	7.496	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-11	112.4	n/a	10/24/2018	68	No	9	75.3	17.43	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-12	275.9	n/a	10/23/2018	201	No	9	222.9	24.89	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-13	333.9	n/a	10/23/2018	279	No	9	255.8	36.67	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-14S	228.5	n/a	10/23/2018	204	No	9	203.1	11.92	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-15	60.28	n/a	10/23/2018	27.3	No	9	44.88	7.227	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-2	311.1	n/a	10/22/2018	278	No	9	287.6	11.06	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-3	355.7	n/a	10/23/2018	215	No	9	306.8	22.93	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-5	269.4	n/a	10/22/2018	292	Yes	9	203.3	30.98	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-6	30	n/a	10/22/2018	25ND	No	9	n/a	n/a	66.67	n/a	n/a	0.004675 NP (NDs) 1 of 3
TDS (mg/L)	GN-GSA-MW-7	255.2	n/a	10/22/2018	209	No	9	218.4	17.24	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-8	204.3	n/a	10/22/2018	184	No	9	191.4	6.023	0	None	No	0.0006839 Param 1 of 3

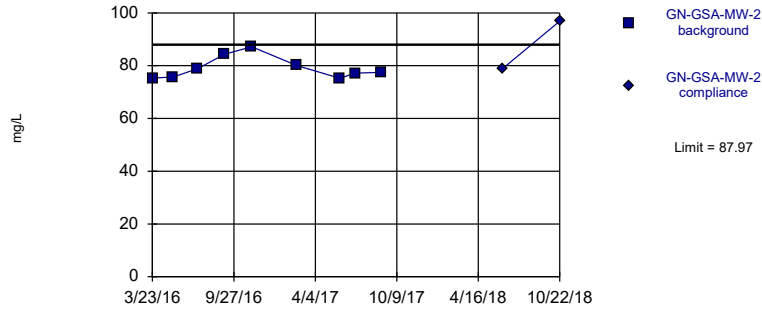
Intrawell Prediction Limit Summary Table - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:05 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDsND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
TDS (mg/L)	GN-GSA-MW-9	212.4	n/a	10/22/2018	177	No	9	167.9	20.88	0	None	No	0.0006839 Param 1 of 3

Exceeds Limit

Prediction Limit
Intrawell Parametric

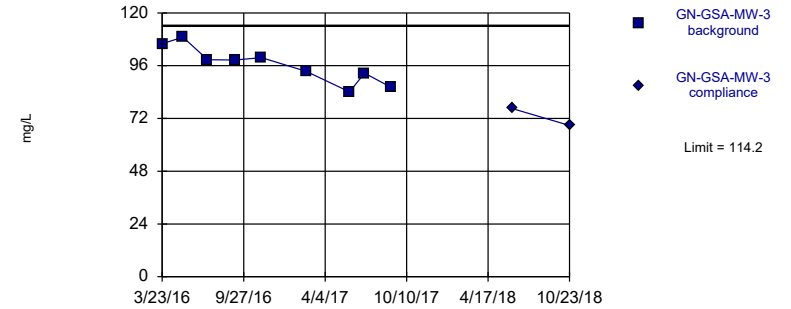


Background Data Summary: Mean=79.02, Std. Dev.=4.196, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8568, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

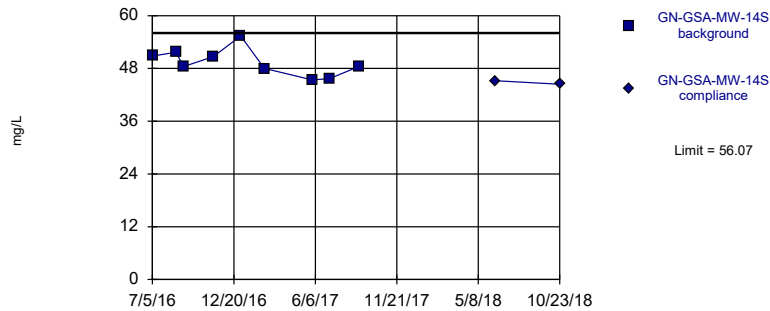


Background Data Summary: Mean=96.47, Std. Dev.=8.312, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9589, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

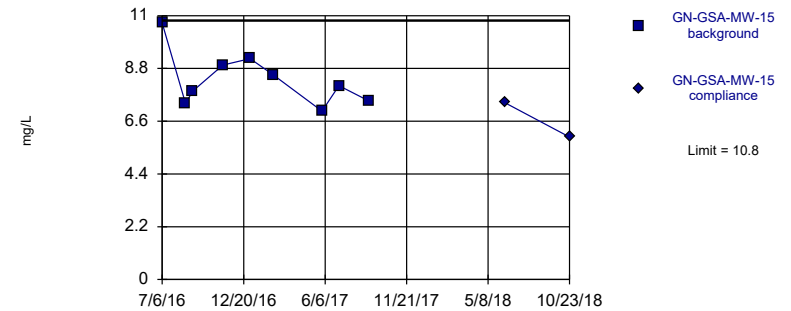


Background Data Summary: Mean=49.4, Std. Dev.=3.13, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9446, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=8.347, Std. Dev.=1.15, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-14S	GN-GSA-MW-14S
7/5/2016	50.8	
8/23/2016	51.7	
9/7/2016	48.4	
11/8/2016	50.7	
1/3/2017	55.4	
2/21/2017	48	
5/31/2017	45.4	
7/5/2017	45.7	
9/5/2017	48.5	
6/12/2018		45.2
10/23/2018		44.4

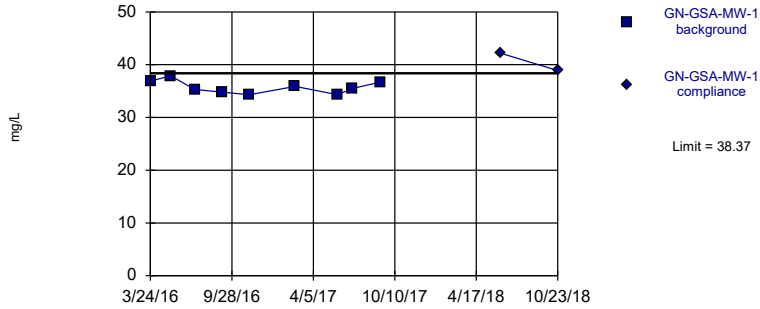
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-15	GN-GSA-MW-15
7/6/2016	10.7	
8/23/2016	7.34	
9/7/2016	7.86	
11/8/2016	8.94	
1/3/2017	9.21	
2/20/2017	8.53	
5/31/2017	7.02	
7/5/2017	8.08	
9/5/2017	7.44	
6/12/2018		7.37
10/23/2018		5.94

Exceeds Limit

Prediction Limit
Intrawell Parametric

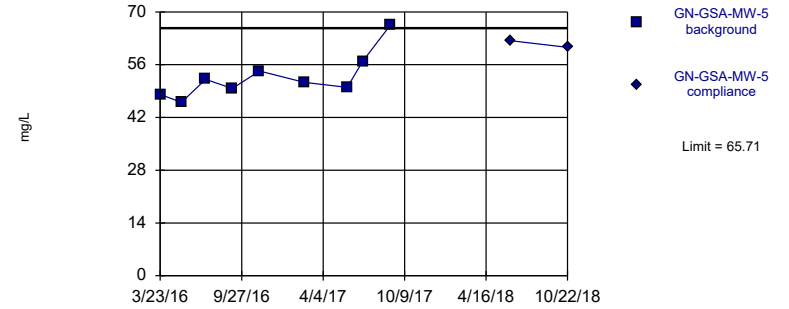


Background Data Summary: Mean=35.73, Std. Dev.=1.237, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9419, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

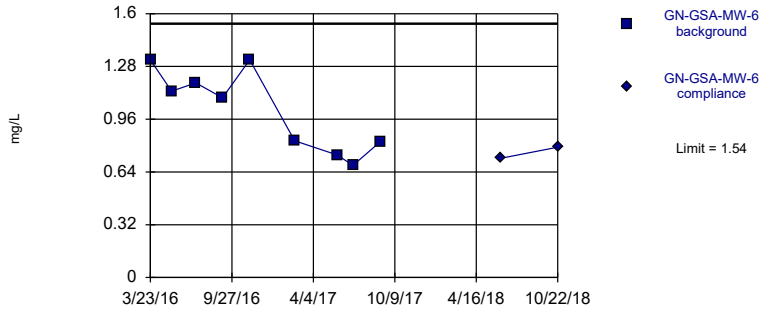


Background Data Summary: Mean=52.77, Std. Dev.=6.075, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8706, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

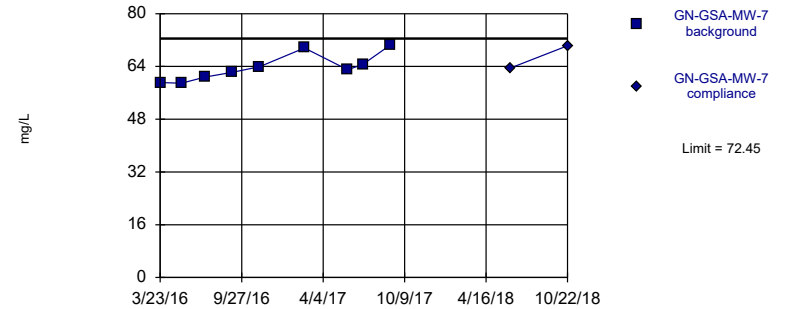


Background Data Summary: Mean=1.013, Std. Dev.=0.2472, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.898, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=63.62, Std. Dev.=4.141, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9059, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	36.9	
5/10/2016	37.9	
7/5/2016	35.3	
9/6/2016	34.8	
11/8/2016	34.3	
2/22/2017	35.9	
5/31/2017	34.3	
7/5/2017	35.5	
9/7/2017	36.7	
6/12/2018		42.2
10/23/2018		38.9

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	48.1	
5/11/2016	46	
7/6/2016	52.1	
9/6/2016	49.7	
11/8/2016	54.3	
2/20/2017	51.3	
5/30/2017	50	
7/5/2017	56.9	
9/7/2017	66.5	
6/11/2018		62.4
10/22/2018		60.6

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

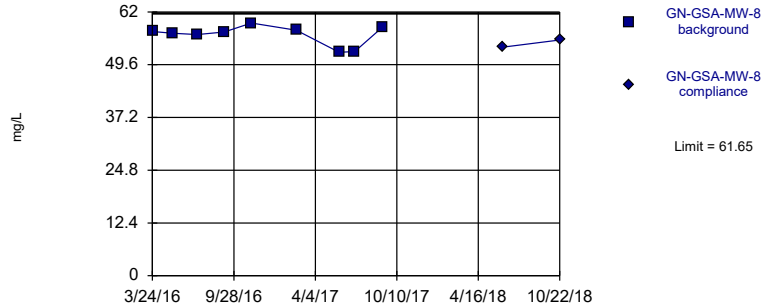
	GN-GSA-MW-6	GN-GSA-MW-6
3/23/2016	1.32	
5/11/2016	1.13	
7/6/2016	1.18	
9/6/2016	1.09	
11/8/2016	1.32	
2/20/2017	0.829	
5/30/2017	0.743	
7/5/2017	0.68	
9/7/2017	0.825	
6/11/2018		0.722
10/22/2018		0.79

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	59.1	
5/11/2016	58.9	
7/6/2016	60.8	
9/6/2016	62.2	
11/8/2016	63.9	
2/20/2017	69.6	
5/31/2017	63	
7/5/2017	64.6	
9/7/2017	70.5	
6/11/2018		63.5
10/22/2018		70.3

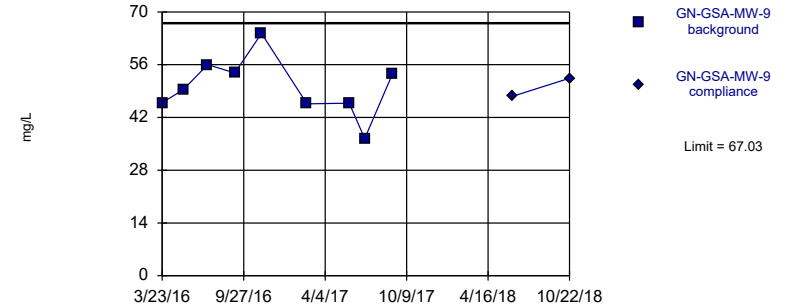
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=56.57, Std. Dev.=2.387, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8287, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

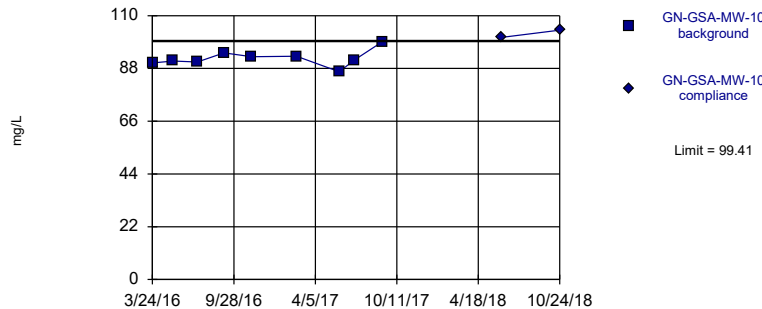
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=50.08, Std. Dev.=7.955, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9649, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

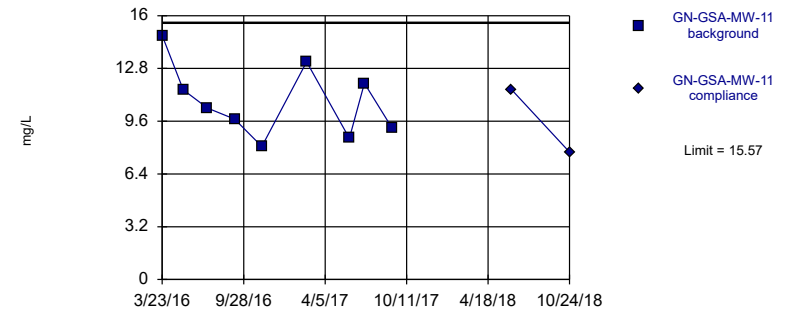
Exceeds Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=92.19, Std. Dev.=3.387, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9444, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=10.82, Std. Dev.=2.23, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9564, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-8
3/24/2016	57.4	
5/11/2016	57	
7/6/2016	56.7	
9/6/2016	57.3	
11/8/2016	59.4	
2/20/2017	57.7	
5/30/2017	52.5	
7/5/2017	52.7	
9/7/2017	58.4	
6/12/2018		53.7
10/22/2018		55.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	45.9	
5/11/2016	49.4	
7/6/2016	56	
9/7/2016	53.8	
11/8/2016	64.3	
2/21/2017	45.6	
5/30/2017	45.8	
7/5/2017	36.4	
9/7/2017	53.5	
6/12/2018		47.6
10/22/2018		52.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-10
3/24/2016	90.3	
5/11/2016	91.1	
7/6/2016	90.7	
9/6/2016	94.5	
11/9/2016	92.9	
2/21/2017	93.1	
5/31/2017	86.6	
7/5/2017	91.5	
9/7/2017	99	
6/12/2018		101
10/24/2018		104

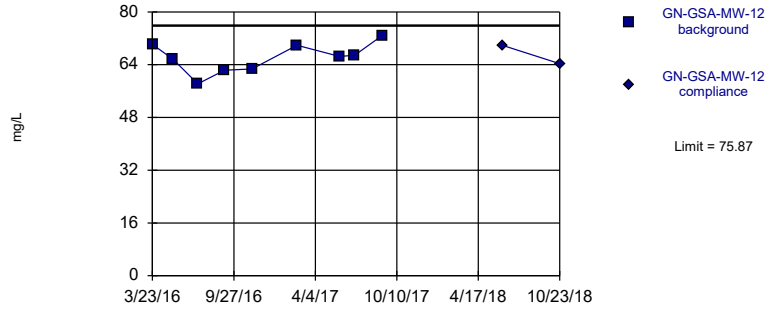
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-11
3/23/2016	14.8	
5/11/2016	11.5	
7/6/2016	10.4	
9/7/2016	9.73	
11/9/2016	8.07	
2/21/2017	13.2	
5/31/2017	8.56	
7/5/2017	11.9	
9/7/2017	9.2	
6/12/2018		11.5
10/24/2018		7.73

Within Limit

Prediction Limit
Intrawell Parametric

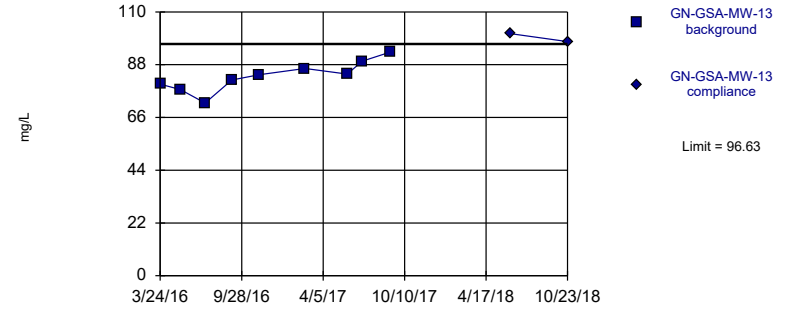


Background Data Summary: Mean=66.13, Std. Dev.=4.568, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9759, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit
Intrawell Parametric

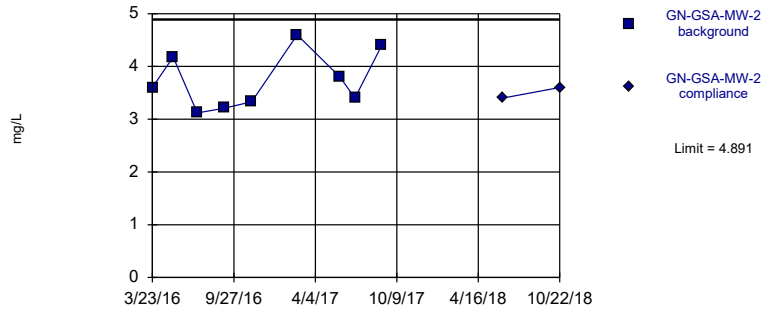


Background Data Summary: Mean=83.12, Std. Dev.=6.337, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9932, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-12
3/23/2016	70.2	
5/10/2016	65.6	
7/6/2016	58.2	
9/6/2016	62.3	
11/9/2016	62.7	
2/21/2017	69.9	
5/31/2017	66.5	
7/5/2017	66.9	
9/7/2017	72.9	
6/12/2018		69.9
10/23/2018		64.3

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-13	GN-GSA-MW-13
3/24/2016	79.9	
5/10/2016	77.6	
7/6/2016	72	
9/6/2016	81.6	
11/8/2016	83.8	
2/22/2017	86.4	
5/31/2017	84.1	
7/5/2017	89.5	
9/7/2017	93.2	
6/12/2018		101
10/23/2018		97.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	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

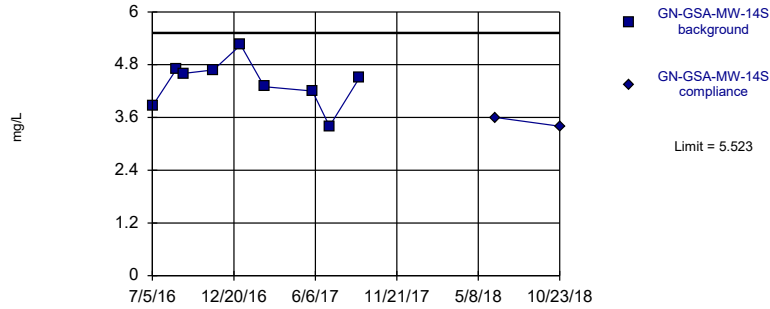
Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-3	GN-GSA-MW-3
3/23/2016	3.67	
5/10/2016	3.34	
7/6/2016	3.08	
9/7/2016	2.95	
11/8/2016	2.92	
2/20/2017	3.3	
5/31/2017	2.9	
7/5/2017	2.6	
9/5/2017	3.5	
6/12/2018		3.1
10/23/2018		2.6

Within Limit

Prediction Limit
Intrawell Parametric

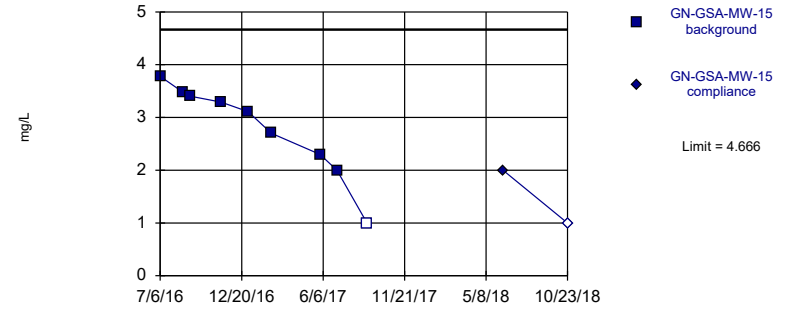


Background Data Summary: Mean=4.387, Std. Dev.=0.5333, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9651, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

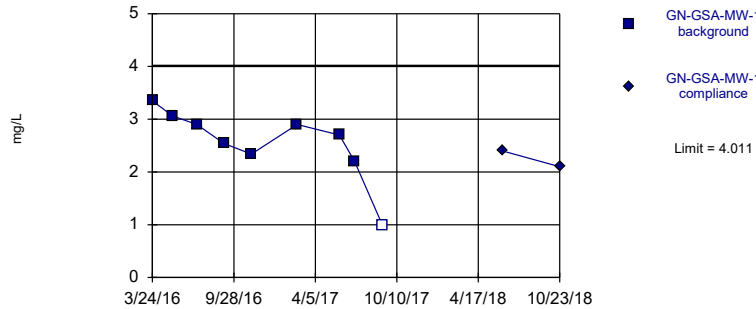


Background Data Summary: Mean=2.783, Std. Dev.=0.8834, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9126, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

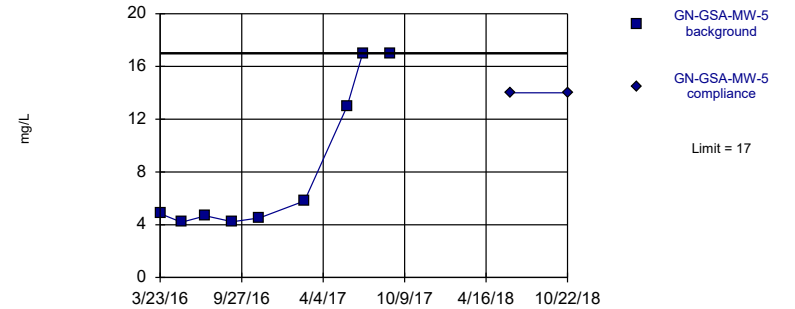


Background Data Summary: Mean=2.554, Std. Dev.=0.6834, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8742, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - 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 the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-14S	GN-GSA-MW-14S
7/5/2016	3.86	
8/23/2016	4.69	
9/7/2016	4.6	
11/8/2016	4.68	
1/3/2017	5.25	
2/21/2017	4.3	
5/31/2017	4.2	
7/5/2017	3.4	
9/5/2017	4.5	
6/12/2018		3.6
10/23/2018		3.4

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-15	GN-GSA-MW-15
7/6/2016	3.78	
8/23/2016	3.47	
9/7/2016	3.4	
11/8/2016	3.29	
1/3/2017	3.11	
2/20/2017	2.7	
5/31/2017	2.3	
7/5/2017	2	
9/5/2017	<2 (U*)	
6/12/2018		2
10/23/2018		<2 (J)

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	3.35	
5/10/2016	3.06	
7/5/2016	2.9	
9/6/2016	2.54	
11/8/2016	2.34	
2/22/2017	2.9	
5/31/2017	2.7	
7/5/2017	2.2	
9/7/2017	<2 (U*)	
6/12/2018		2.4
10/23/2018		2.1

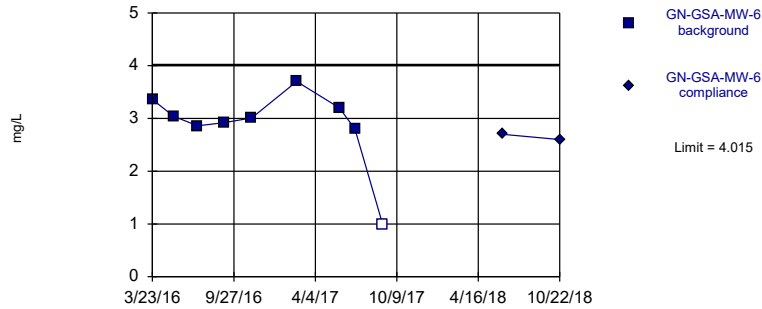
Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	4.84	
5/11/2016	4.19	
7/6/2016	4.67	
9/6/2016	4.23	
11/8/2016	4.51	
2/20/2017	5.8	
5/30/2017	13	
7/5/2017	17	
9/7/2017	17	
6/11/2018		14
10/22/2018		14

Within Limit

Prediction Limit
Intrawell Parametric

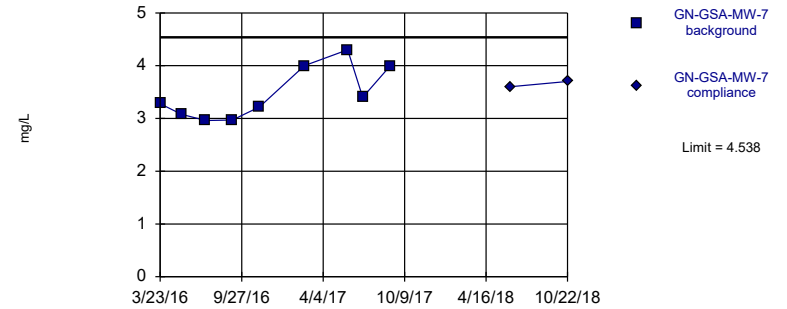


Background Data Summary (based on square transformation): Mean=8.785, Std. Dev.=3.44, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8682, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

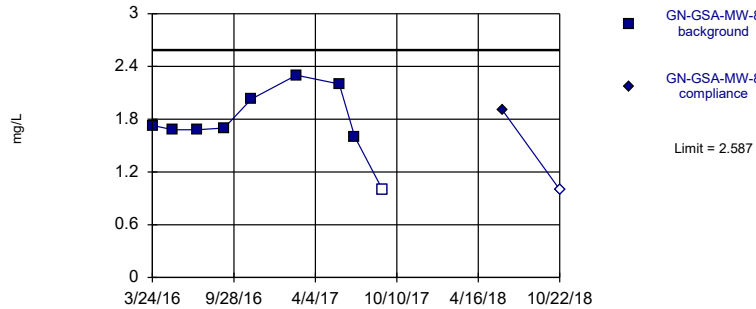


Background Data Summary: Mean=3.468, Std. Dev.=0.502, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8667, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

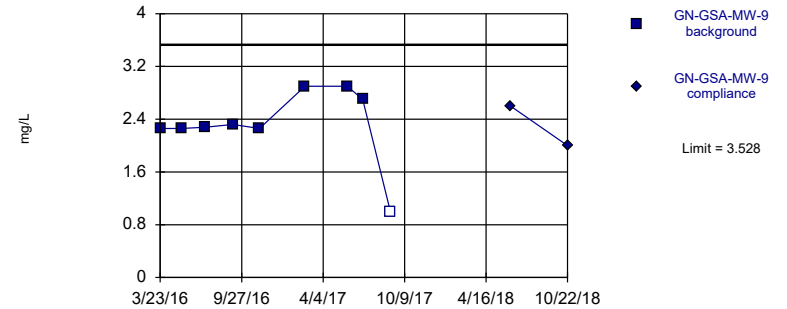


Background Data Summary: Mean=1.769, Std. Dev.=0.3837, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9076, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.32, Std. Dev.=0.567, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7828, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	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

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	3.28	
5/11/2016	3.08	
7/6/2016	2.96	
9/6/2016	2.97	
11/8/2016	3.22	
2/20/2017	4	
5/31/2017	4.3	
7/5/2017	3.4	
9/7/2017	4	
6/11/2018		3.6
10/22/2018		3.7

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	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

Prediction Limit

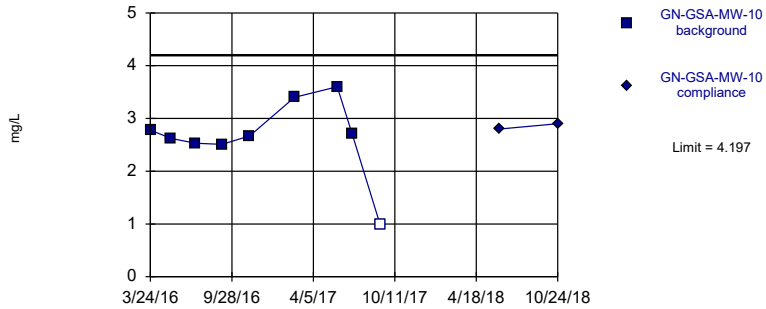
Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	2.26	
5/11/2016	2.26	
7/6/2016	2.28	
9/7/2016	2.32	
11/8/2016	2.26	
2/21/2017	2.9	
5/30/2017	2.9	
7/5/2017	2.7	
9/7/2017	<2 (U*)	
6/12/2018		2.6
10/22/2018		2

Within Limit

Prediction Limit
Intrawell Parametric

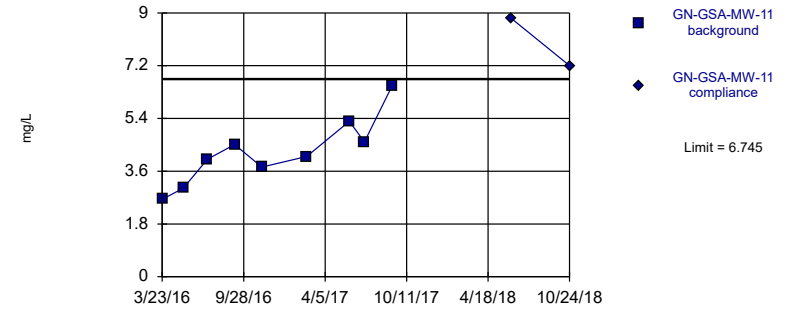


Background Data Summary: Mean=2.646, Std. Dev.=0.7282, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8302, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit
Intrawell Parametric

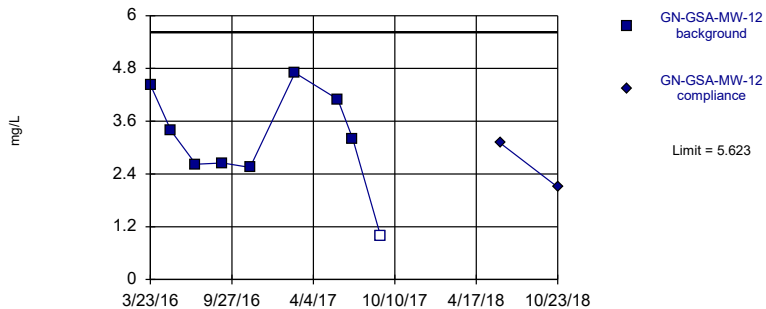


Background Data Summary: Mean=4.269, Std. Dev.=1.162, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9661, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

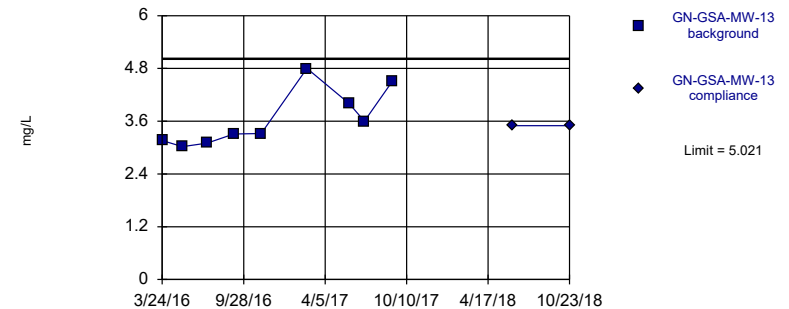


Background Data Summary: Mean=3.181, Std. Dev.=1.146, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9447, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=3.646, Std. Dev.=0.6455, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8625, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-10
3/24/2016	2.78	
5/11/2016	2.62	
7/6/2016	2.53	
9/6/2016	2.51	
11/9/2016	2.67	
2/21/2017	3.4	
5/31/2017	3.6	
7/5/2017	2.7	
9/7/2017	<2 (U*)	
6/12/2018		2.8
10/24/2018		2.9

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-11
3/23/2016	2.64	
5/11/2016	3.02	
7/6/2016	4.01	
9/7/2016	4.51	
11/9/2016	3.74	
2/21/2017	4.1	
5/31/2017	5.3	
7/5/2017	4.6	
9/7/2017	6.5	
6/12/2018		8.8
10/24/2018		7.2

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

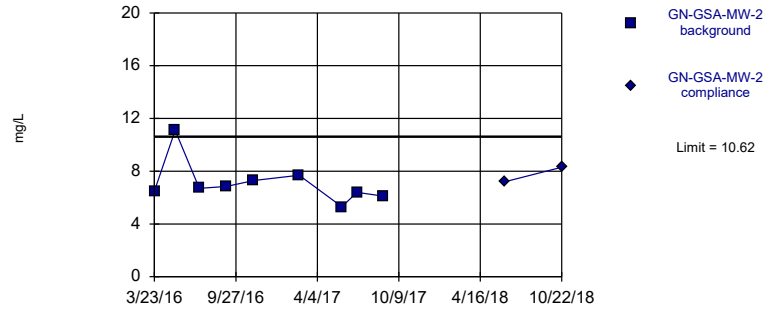
	GN-GSA-MW-12	GN-GSA-MW-12
3/23/2016	4.43	
5/10/2016	3.38	
7/6/2016	2.62	
9/6/2016	2.65	
11/9/2016	2.55	
2/21/2017	4.7	
5/31/2017	4.1	
7/5/2017	3.2	
9/7/2017	<2 (U*)	
6/12/2018		3.1
10/23/2018		2.1

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-13	GN-GSA-MW-13
3/24/2016	3.16	
5/10/2016	3.02	
7/6/2016	3.1	
9/6/2016	3.31	
11/8/2016	3.32	
2/22/2017	4.8	
5/31/2017	4	
7/5/2017	3.6	
9/7/2017	4.5	
6/12/2018		3.5
10/23/2018		3.5

Within Limit Prediction Limit
Intrawell Parametric



Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2	GN-GSA-MW-2
3/23/2016	6.48	
5/10/2016	11.1	
7/5/2016	6.7	
9/6/2016	6.85	
11/8/2016	7.3	
2/21/2017	7.7	
5/31/2017	5.3	
7/5/2017	6.4	
9/5/2017	6.1	
6/12/2018		7.2
10/22/2018		8.3

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-3	GN-GSA-MW-3
3/23/2016	32.6	
5/10/2016	27.6	
7/6/2016	23.6	
9/7/2016	22.2	
11/8/2016	20.4	
2/20/2017	14	
5/31/2017	15	
7/5/2017	11	
9/5/2017	17	
6/12/2018		14
10/23/2018		12

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-14S	GN-GSA-MW-14S
7/5/2016	11.7	
8/23/2016	13.7	
9/7/2016	12.4	
11/8/2016	12.9	
1/3/2017	14.1	
2/21/2017	6.1	
5/31/2017	8	
7/5/2017	3.8 (J)	
9/5/2017	6.8	
6/12/2018		5
10/23/2018		5.4

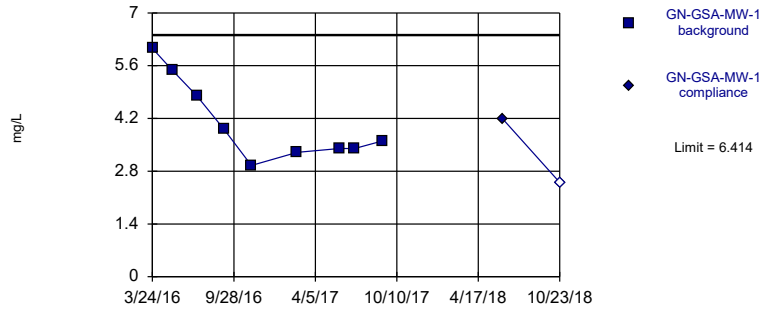
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-15	GN-GSA-MW-15
7/6/2016	5.38	
8/23/2016	4.23	
9/7/2016	3.84	
11/8/2016	3.23	
1/3/2017	3	
2/20/2017	3.1 (J)	
5/31/2017	2.1 (J)	
7/5/2017	2 (J)	
9/5/2017	2.2 (J)	
6/12/2018		2.3 (J)
10/23/2018		<5

Within Limit

Prediction Limit
Intrawell Parametric

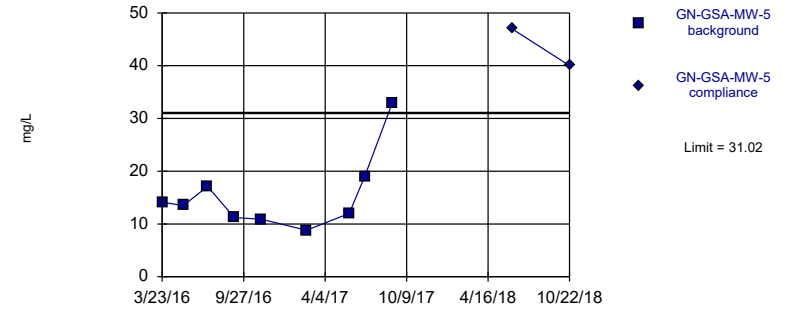


Background Data Summary: Mean=4.099, Std. Dev.=1.086, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8668, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit
Intrawell Parametric

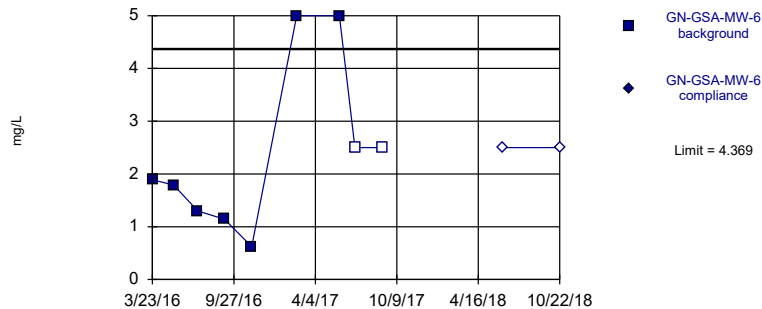


Background Data Summary: Mean=15.51, Std. Dev.=7.278, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7851, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

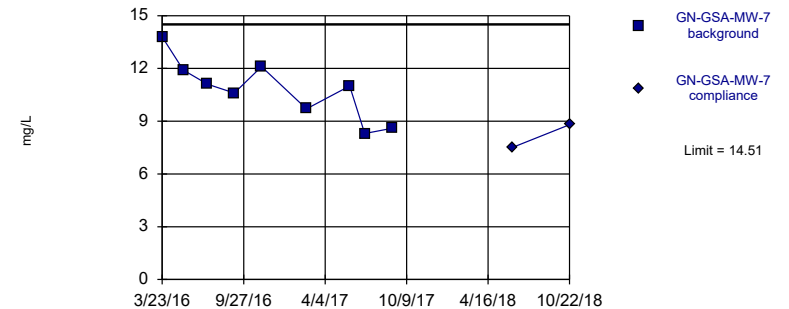


Background Data Summary (after Kaplan-Meier Adjustment): Mean=1.754, Std. Dev.=1.227, n=9, 22.22% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7711, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=10.79, Std. Dev.=1.745, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	6.06	
5/10/2016	5.47	
7/5/2016	4.8	
9/6/2016	3.91	
11/8/2016	2.95	
2/22/2017	3.3 (J)	
5/31/2017	3.4 (J)	
7/5/2017	3.4 (J)	
9/7/2017	3.6 (J)	
6/12/2018		4.2 (J)
10/23/2018		<5 (J)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	14.1	
5/11/2016	13.5	
7/6/2016	17.1	
9/6/2016	11.2	
11/8/2016	10.9	
2/20/2017	8.8	
5/30/2017	12	
7/5/2017	19	
9/7/2017	33	
6/11/2018		47
10/22/2018		40

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-6	GN-GSA-MW-6
3/23/2016	1.89	
5/11/2016	1.79	
7/6/2016	1.3	
9/6/2016	1.14	
11/8/2016	0.622 (J)	
2/20/2017	5	
5/30/2017	5	
7/5/2017	<5	
9/7/2017	<5	
6/11/2018		<5
10/22/2018		<5

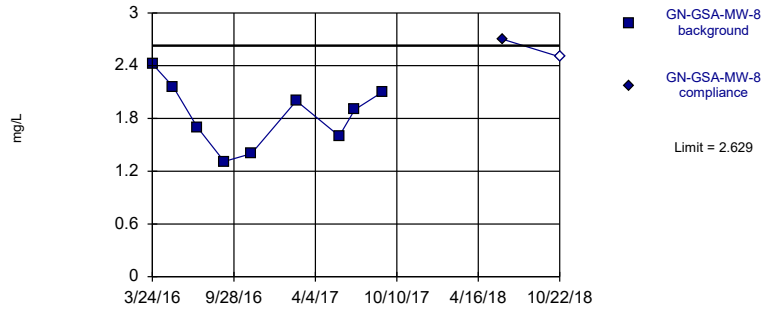
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	13.8	
5/11/2016	11.9	
7/6/2016	11.1	
9/6/2016	10.6	
11/8/2016	12.1	
2/20/2017	9.7	
5/31/2017	11	
7/5/2017	8.3	
9/7/2017	8.6	
6/11/2018		7.5
10/22/2018		8.8

Within Limit

Prediction Limit
Intrawell Parametric

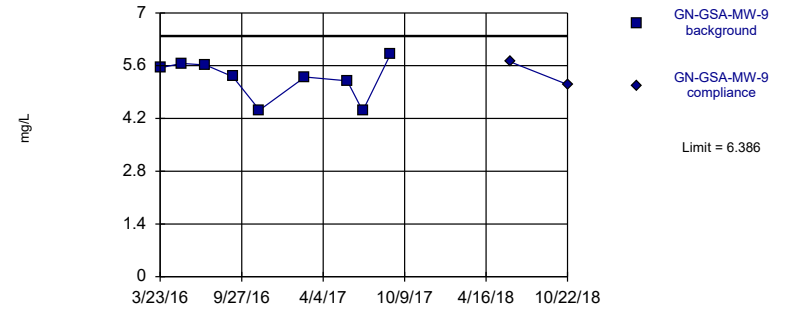


Background Data Summary: Mean=1.843, Std. Dev.=0.3686, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9707, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

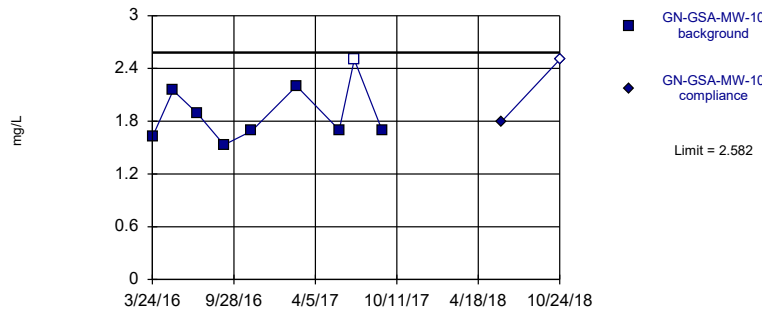


Background Data Summary: Mean=5.261, Std. Dev.=0.528, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8677, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

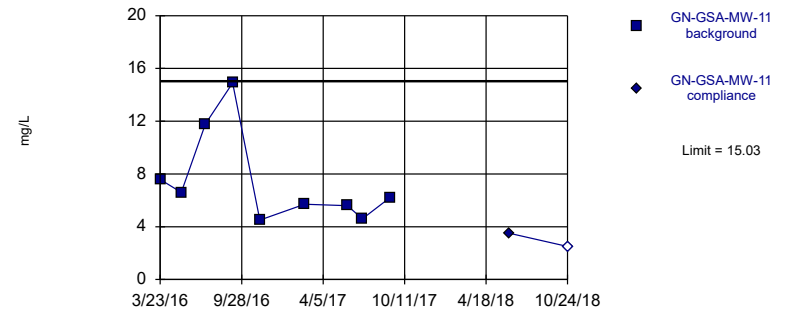


Background Data Summary: Mean=1.887, Std. Dev.=0.326, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8863, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.499, Std. Dev.=3.536, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7987, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-8
3/24/2016	2.42	
5/11/2016	2.16	
7/6/2016	1.7	
9/6/2016	1.31	
11/8/2016	1.4	
2/20/2017	2 (J)	
5/30/2017	1.6 (J)	
7/5/2017	1.9 (J)	
9/7/2017	2.1 (J)	
6/12/2018		2.7 (J)
10/22/2018		<5 (J)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	5.54	
5/11/2016	5.66	
7/6/2016	5.62	
9/7/2016	5.31	
11/8/2016	4.42	
2/21/2017	5.3	
5/30/2017	5.2	
7/5/2017	4.4 (J)	
9/7/2017	5.9	
6/12/2018		5.7
10/22/2018		5.1

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

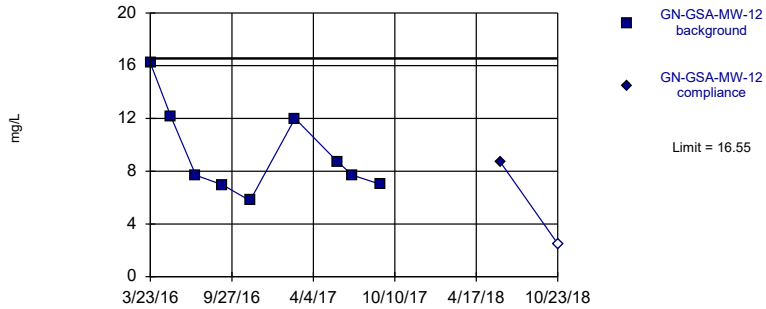
	GN-GSA-MW-10	GN-GSA-MW-10
3/24/2016	1.62	
5/11/2016	2.15	
7/6/2016	1.89	
9/6/2016	1.53	
11/9/2016	1.69	
2/21/2017	2.2 (J)	
5/31/2017	1.7 (J)	
7/5/2017	<5	
9/7/2017	1.7 (J)	
6/12/2018		1.8 (J)
10/24/2018		<5

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-11
3/23/2016	7.59	
5/11/2016	6.6	
7/6/2016	11.8	
9/7/2016	14.9	
11/9/2016	4.5	
2/21/2017	5.7	
5/31/2017	5.6	
7/5/2017	4.6 (J)	
9/7/2017	6.2	
6/12/2018		3.5 (J)
10/24/2018		<5 (J)

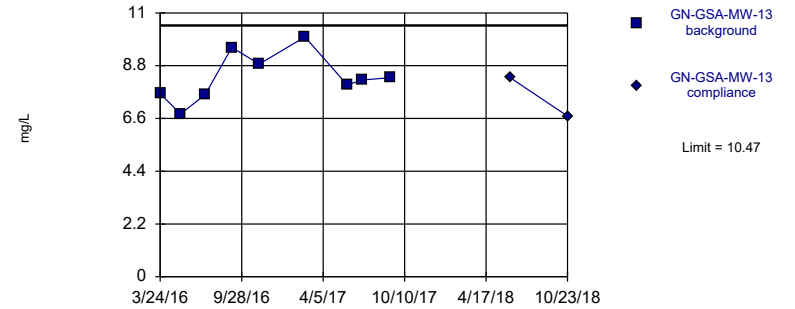
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=9.349, Std. Dev.=3.38, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8645, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

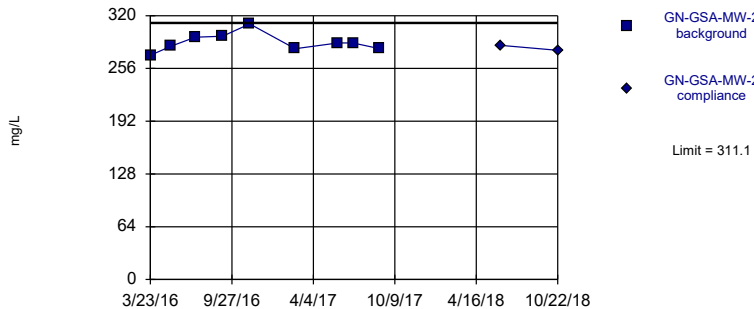
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=8.328, Std. Dev.=1.007, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9665, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

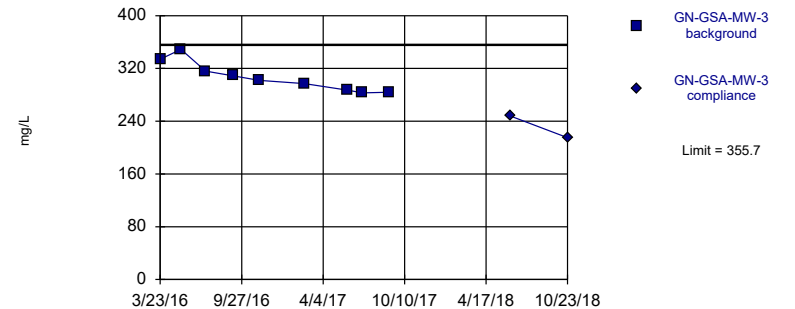
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=287.6, Std. Dev.=11.06, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9438, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=306.8, Std. Dev.=22.93, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9121, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-12
3/23/2016	16.2	
5/10/2016	12.1	
7/6/2016	7.7	
9/6/2016	6.97	
11/9/2016	5.77	
2/21/2017	12	
5/31/2017	8.7	
7/5/2017	7.7	
9/7/2017	7	
6/12/2018		8.7
10/23/2018		<5 (J)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-13	GN-GSA-MW-13
3/24/2016	7.64	
5/10/2016	6.79	
7/6/2016	7.59	
9/6/2016	9.56	
11/8/2016	8.87	
2/22/2017	10	
5/31/2017	8	
7/5/2017	8.2	
9/7/2017	8.3	
6/12/2018		8.3
10/23/2018		6.7

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2	GN-GSA-MW-2
3/23/2016	272	
5/10/2016	283	
7/5/2016	294	
9/6/2016	295	
11/8/2016	310	
2/21/2017	280	
5/31/2017	287	
7/5/2017	287	
9/5/2017	280	
6/12/2018		284
10/22/2018		278

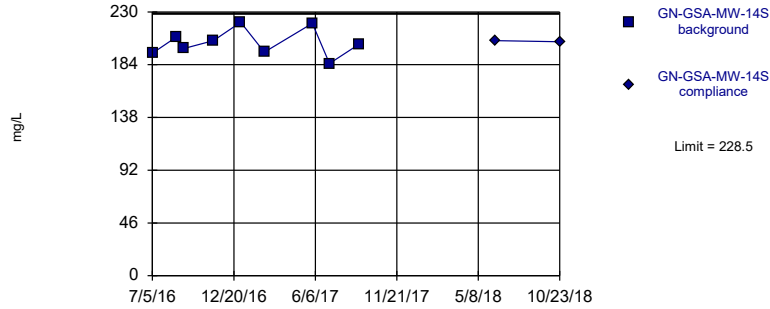
Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-3	GN-GSA-MW-3
3/23/2016	334	
5/10/2016	349	
7/6/2016	316	
9/7/2016	309	
11/8/2016	302	
2/20/2017	297	
5/31/2017	287	
7/5/2017	283	
9/5/2017	284	
6/12/2018		248
10/23/2018		215

Within Limit

Prediction Limit Intrawell Parametric

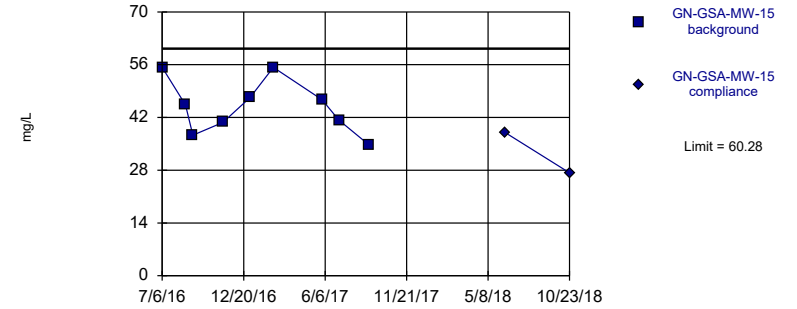


Background Data Summary: Mean=203.1, Std. Dev.=11.92, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9499, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit Intrawell Parametric

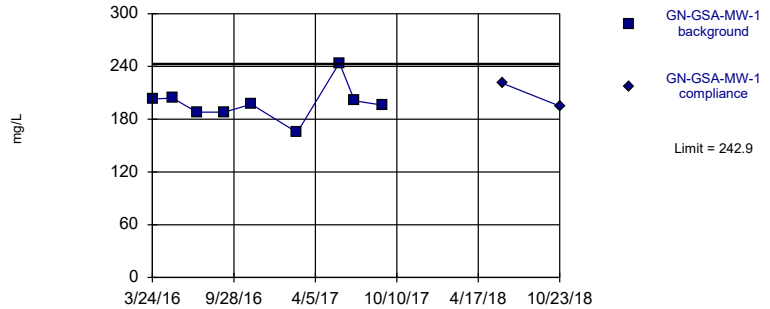


Background Data Summary: Mean=44.88, Std. Dev.=7.227, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9367, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit Intrawell Parametric

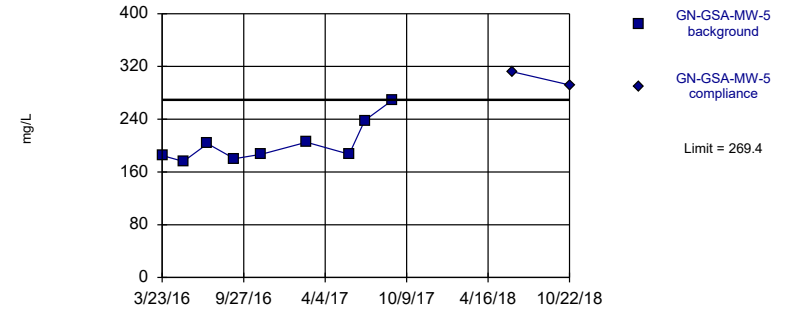


Background Data Summary: Mean=198.4, Std. Dev.=20.85, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8742, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit Intrawell Parametric



Background Data Summary: Mean=203.3, Std. Dev.=30.98, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8137, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-14S	GN-GSA-MW-14S
7/5/2016	194	
8/23/2016	208	
9/7/2016	198	
11/8/2016	205	
1/3/2017	221	
2/21/2017	195	
5/31/2017	220	
7/5/2017	185	
9/5/2017	202	
6/12/2018		205
10/23/2018		204

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-15	GN-GSA-MW-15
7/6/2016	55.3	
8/23/2016	45.3	
9/7/2016	37.3	
11/8/2016	40.7	
1/3/2017	47.3	
2/20/2017	55.3	
5/31/2017	46.7	
7/5/2017	41.3	
9/5/2017	34.7	
6/12/2018		38
10/23/2018		27.3

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	203	
5/10/2016	204	
7/5/2016	188	
9/6/2016	188	
11/8/2016	197	
2/22/2017	165	
5/31/2017	244	
7/5/2017	201	
9/7/2017	196	
6/12/2018		221
10/23/2018		195

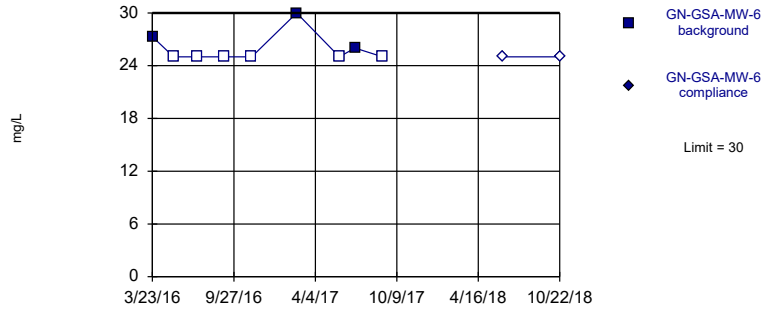
Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	185	
5/11/2016	176	
7/6/2016	203	
9/6/2016	180	
11/8/2016	187	
2/20/2017	205	
5/30/2017	187	
7/5/2017	238	
9/7/2017	269	
6/11/2018		312
10/22/2018		292

Within Limit

Prediction Limit
 Intrawell Non-parametric

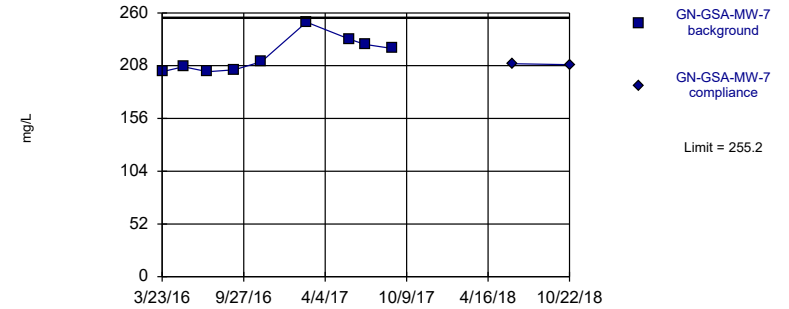


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
 Intrawell Parametric

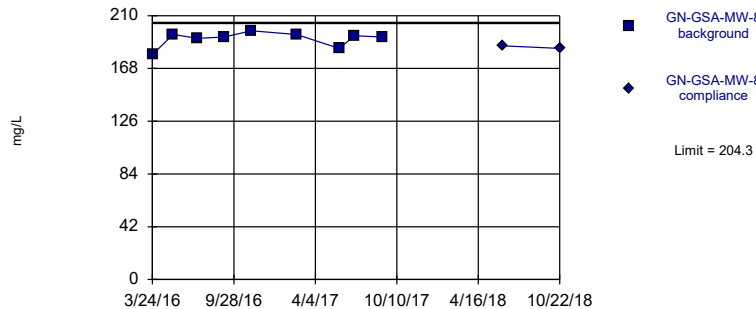


Background Data Summary: Mean=218.4, Std. Dev.=17.24, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
 Intrawell Parametric

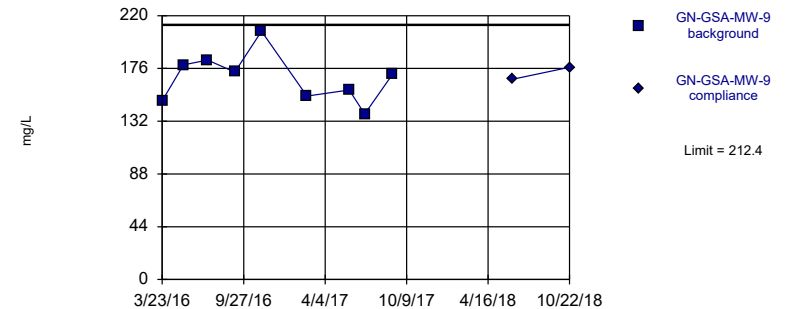


Background Data Summary: Mean=191.4, Std. Dev.=6.023, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8217, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=167.9, Std. Dev.=20.88, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9719, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-6	GN-GSA-MW-6
3/23/2016	27.3	
5/11/2016	<25	
7/6/2016	<25	
9/6/2016	<25	
11/8/2016	<25	
2/20/2017	30	
5/30/2017	<25	
7/5/2017	26	
9/7/2017	<25	
6/11/2018		<25
10/22/2018		<25

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	202	
5/11/2016	207	
7/6/2016	202	
9/6/2016	204	
11/8/2016	212	
2/20/2017	251	
5/31/2017	234	
7/5/2017	229	
9/7/2017	225	
6/11/2018		210
10/22/2018		209

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-8
3/24/2016	179	
5/11/2016	195	
7/6/2016	192	
9/6/2016	193	
11/8/2016	198	
2/20/2017	195	
5/30/2017	184	
7/5/2017	194	
9/7/2017	193	
6/12/2018		186
10/22/2018		184

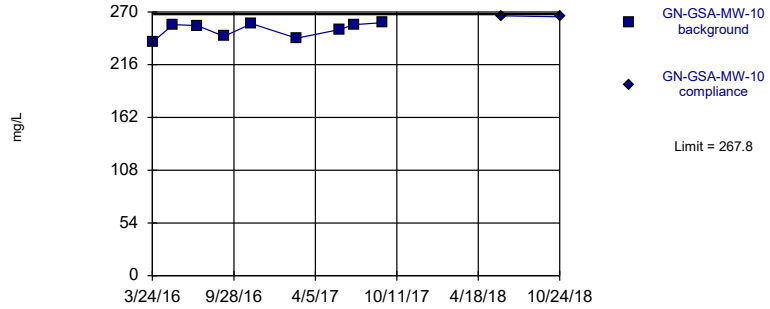
Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	149	
5/11/2016	179	
7/6/2016	183	
9/7/2016	173	
11/8/2016	207	
2/21/2017	153	
5/30/2017	158	
7/5/2017	138	
9/7/2017	171	
6/12/2018		167
10/22/2018		177

Within Limit

Prediction Limit
Intrawell Parametric

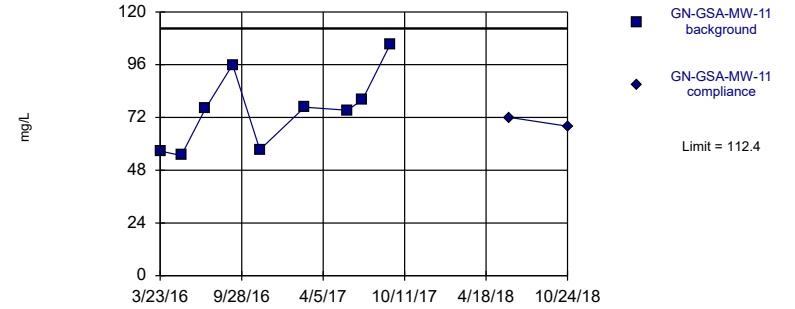


Background Data Summary: Mean=251.8, Std. Dev.=7.496, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8447, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

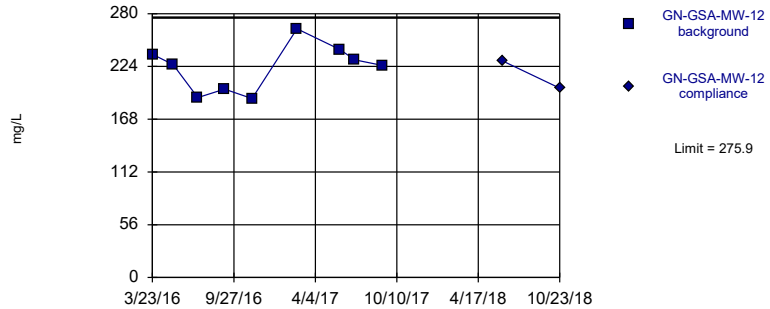


Background Data Summary: Mean=75.3, Std. Dev.=17.43, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9086, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

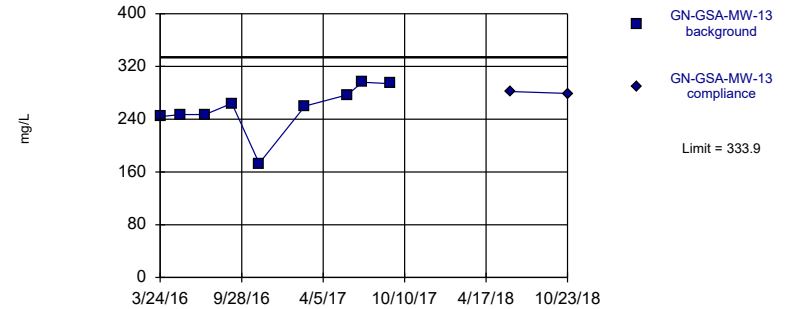


Background Data Summary: Mean=222.9, Std. Dev.=24.89, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9327, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=255.8, Std. Dev.=36.67, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8598, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-10
3/24/2016	239	
5/11/2016	257	
7/6/2016	256	
9/6/2016	245	
11/9/2016	258	
2/21/2017	243	
5/31/2017	252	
7/5/2017	257	
9/7/2017	259	
6/12/2018		266
10/24/2018		265

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-11
3/23/2016	56.7	
5/11/2016	54.7	
7/6/2016	76	
9/7/2016	96	
11/9/2016	57.3	
2/21/2017	76.7	
5/31/2017	75.3	
7/5/2017	80	
9/7/2017	105	
6/12/2018		72
10/24/2018		68

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-12
3/23/2016	237	
5/10/2016	226	
7/6/2016	191	
9/6/2016	200	
11/9/2016	190	
2/21/2017	264	
5/31/2017	242	
7/5/2017	231	
9/7/2017	225	
6/12/2018		230
10/23/2018		201

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-13	GN-GSA-MW-13
3/24/2016	244	
5/10/2016	247	
7/6/2016	247	
9/6/2016	264	
11/8/2016	173	
2/22/2017	260	
5/31/2017	277	
7/5/2017	296	
9/7/2017	294	
6/12/2018		282
10/23/2018		279

Trend Test Summary Table - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:15 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-3 (bg)	-14.02	-45	-34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-13	10.24	45	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-15 (bg)	-1.52	-51	-34	Yes	11	18.18	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-11	1.99	45	34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-3 (bg)	-8.111	-42	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-1.627	-35	-34	Yes	11	9.091	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-3 (bg)	-39.69	-51	-34	Yes	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-5	53.75	40	34	Yes	11	0	n/a	n/a	0.01	NP

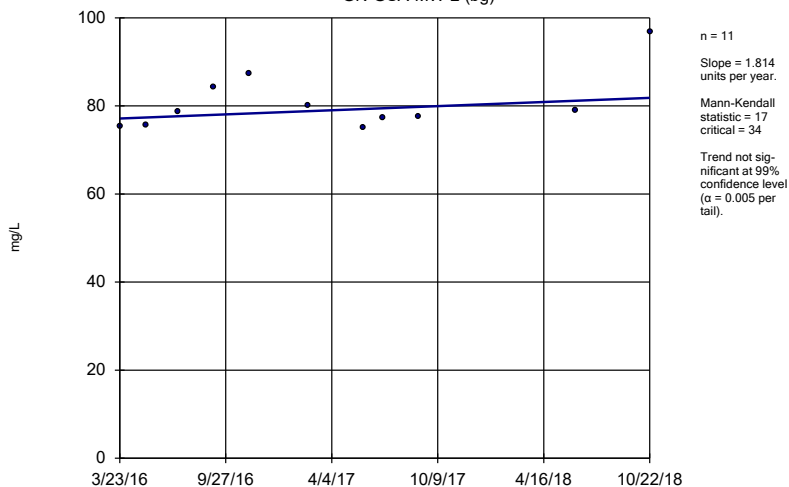
Trend Test Summary Table - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:15 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-2 (bg)	1.814	17	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-3 (bg)	-14.02	-45	-34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-14S (bg)	-3.221	-33	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-15 (bg)	-1.279	-25	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-1	0.944	10	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-10	4.742	31	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-13	10.24	45	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-2 (bg)	0.1382	9	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-3 (bg)	-0.2147	-24	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-14S (bg)	-0.5489	-24	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-15 (bg)	-1.52	-51	-34	Yes	11	18.18	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-11	1.99	45	34	Yes	11	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-2 (bg)	0.01133	25	38	No	12	41.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-3 (bg)	-0.00848	-15	-38	No	12	16.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-14S (bg)	-0.008334	-21	-38	No	12	25	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-15 (bg)	1.5e-9	24	38	No	12	58.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-1	0.02215	15	38	No	12	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-8	-0.006981	-18	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-2 (bg)	-0.01811	-15	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-3 (bg)	-0.03383	-9	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-14S (bg)	0.01334	8	38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-15 (bg)	-0.02105	-12	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-1	-0.01358	-11	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-6	-0.05604	-14	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-2 (bg)	0.1984	1	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-3 (bg)	-8.111	-42	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-14S (bg)	-4.189	-27	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-1.627	-35	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-5	10.82	21	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-2 (bg)	-2.039	-7	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-3 (bg)	-39.69	-51	-34	Yes	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-14S (bg)	1.58	2	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-15 (bg)	-8.306	-24	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-5	53.75	40	34	Yes	11	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

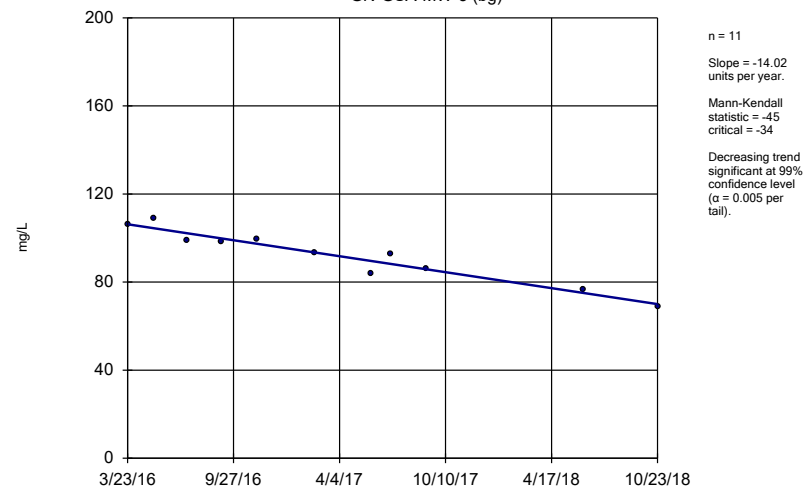
GN-GSA-MW-2 (bg)



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

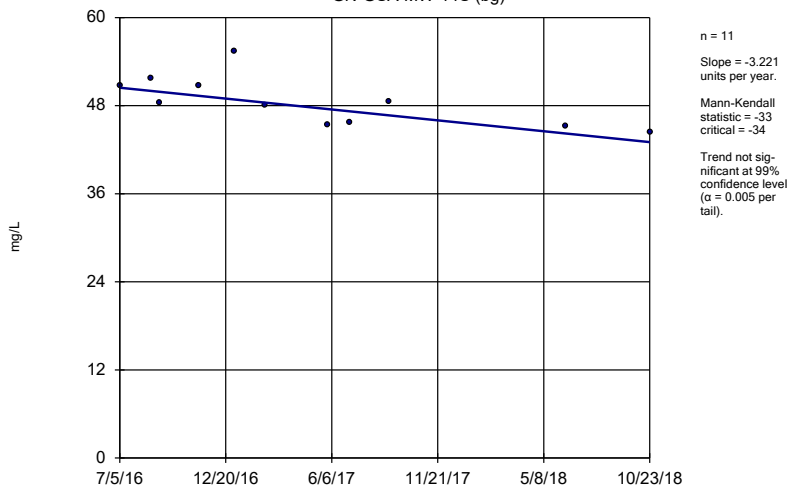
GN-GSA-MW-3 (bg)



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

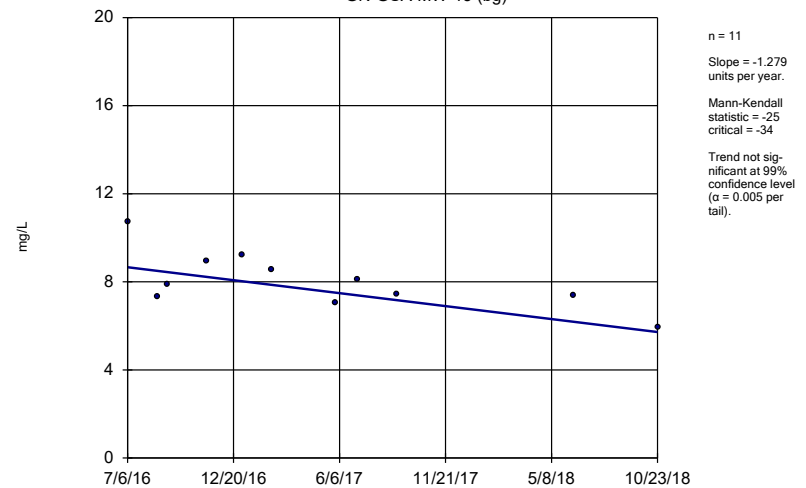
GN-GSA-MW-14S (bg)



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

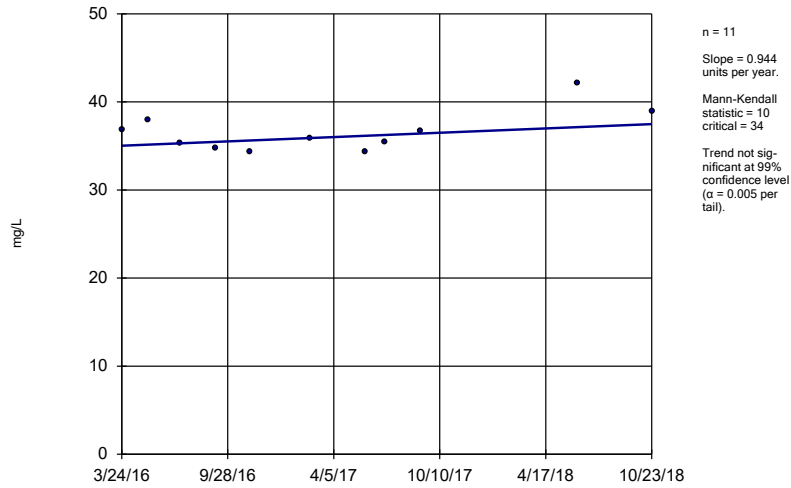
GN-GSA-MW-15 (bg)



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

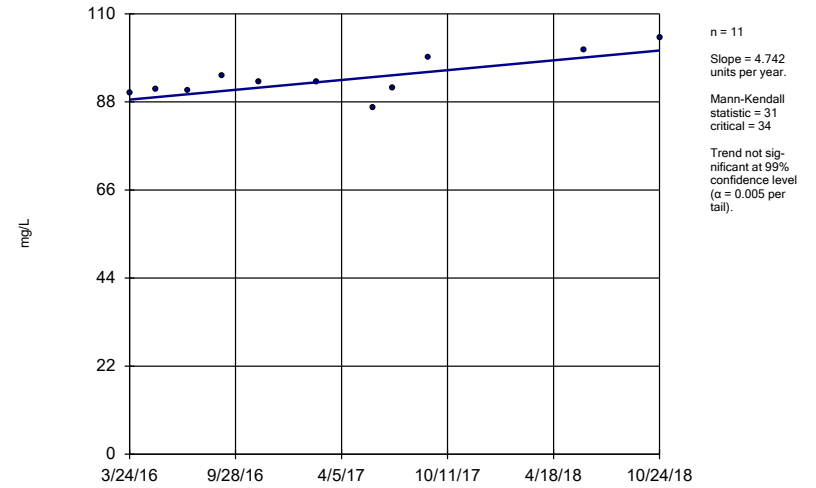
GN-GSA-MW-1



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

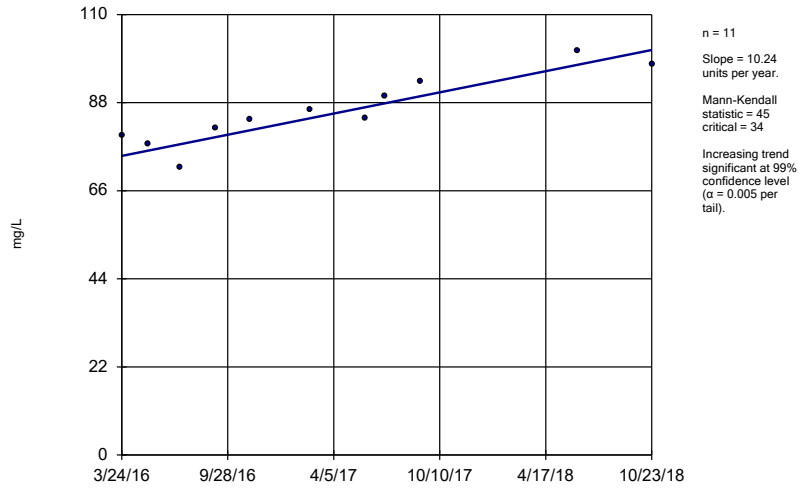
GN-GSA-MW-10



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

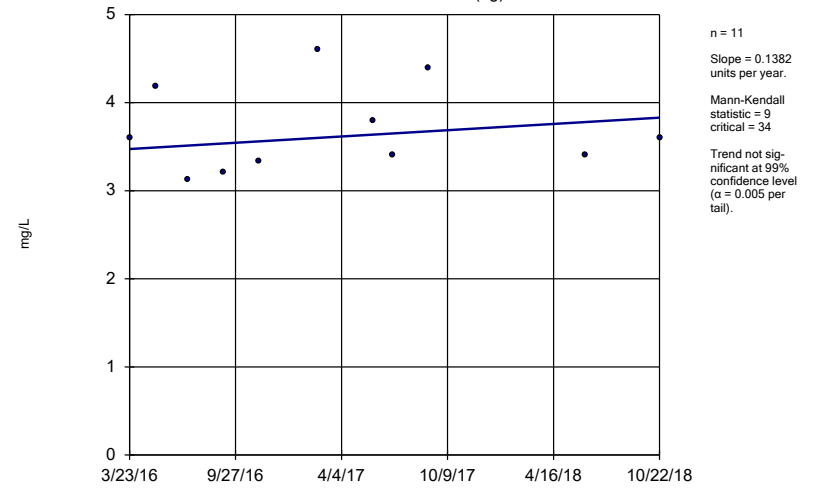
GN-GSA-MW-13



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

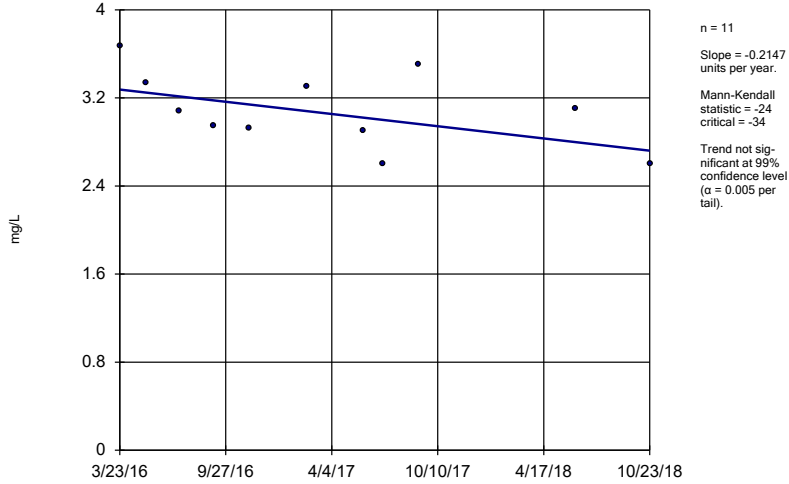
GN-GSA-MW-2 (bg)



Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

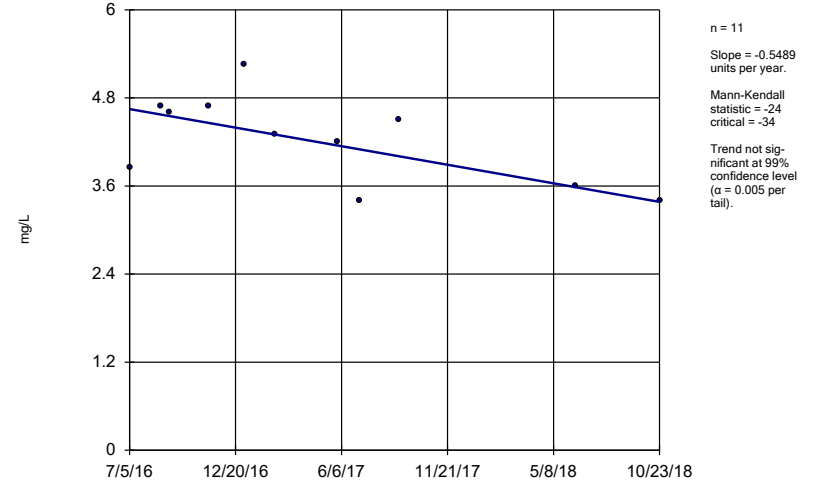
GN-GSA-MW-3 (bg)



Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

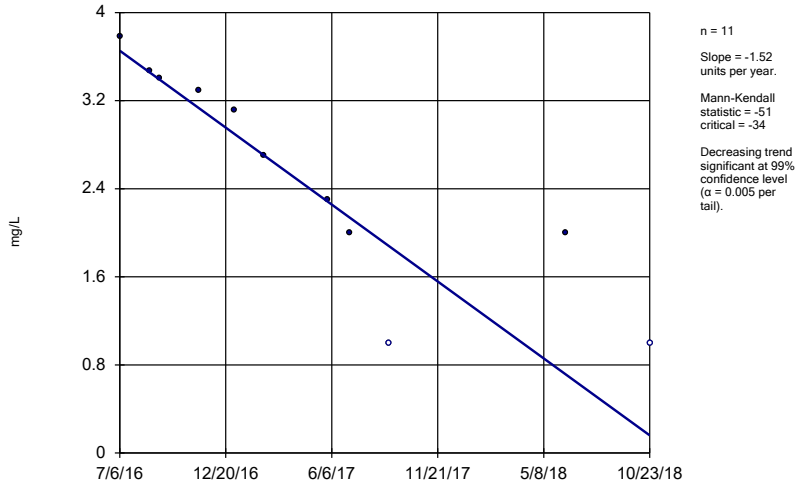
GN-GSA-MW-14S (bg)



Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

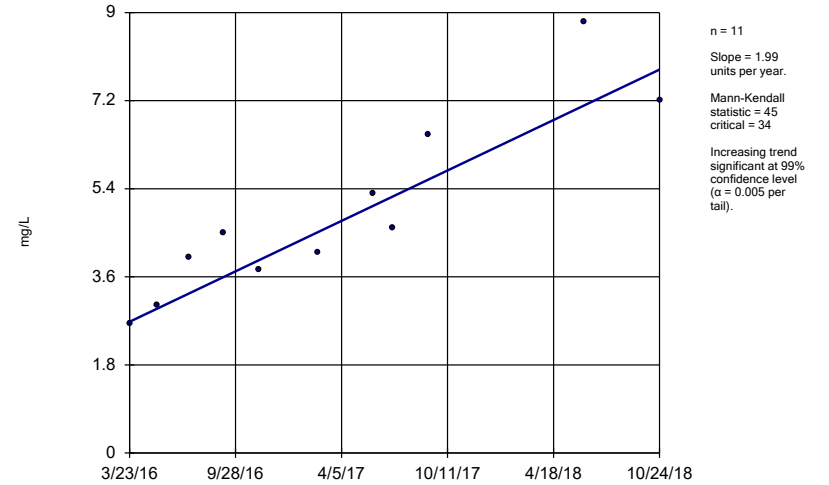
GN-GSA-MW-15 (bg)



Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

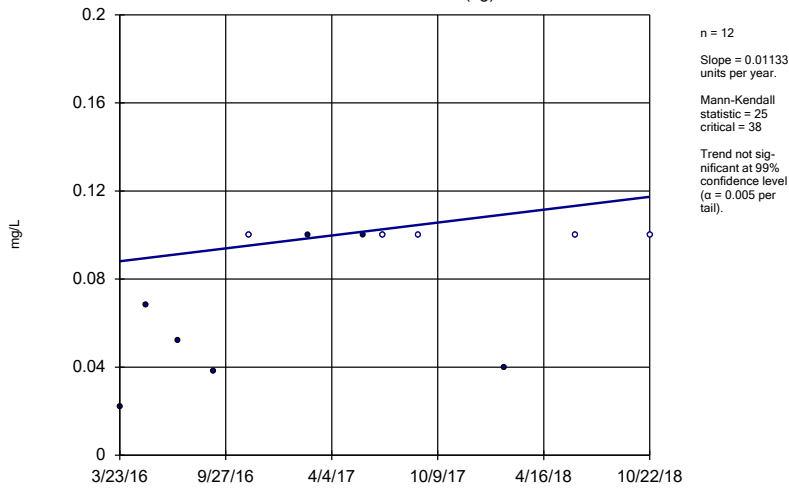
Sen's Slope Estimator

GN-GSA-MW-11



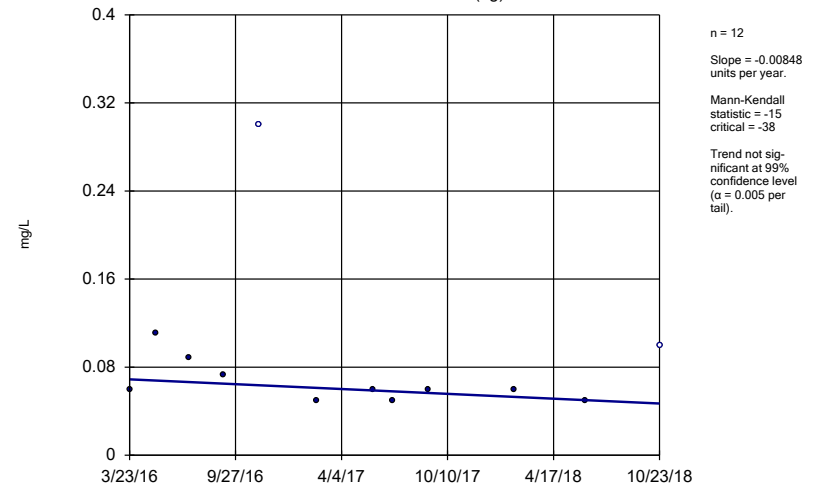
Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-2 (bg)



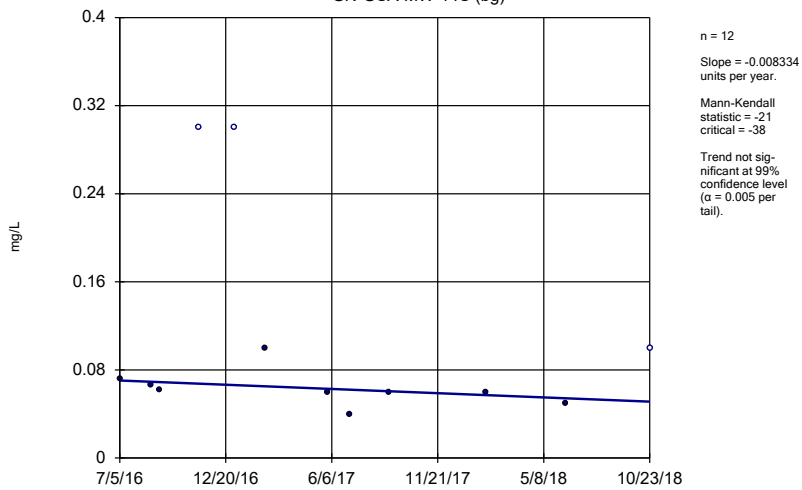
Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-3 (bg)



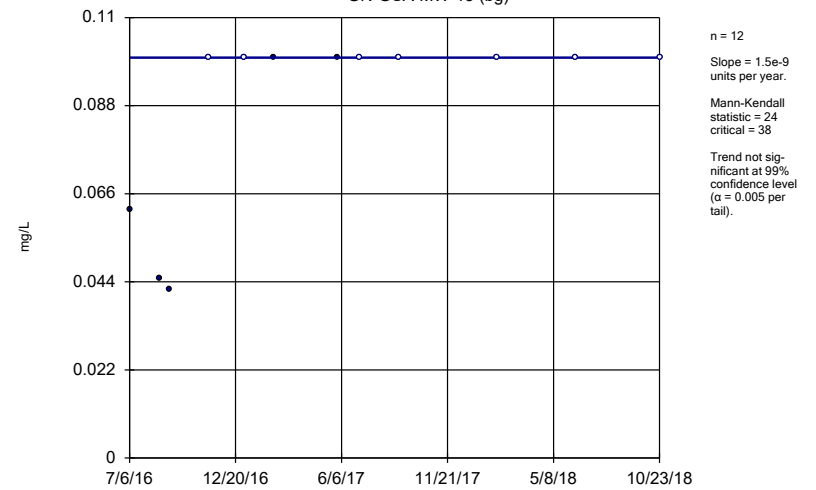
Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-14S (bg)



Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

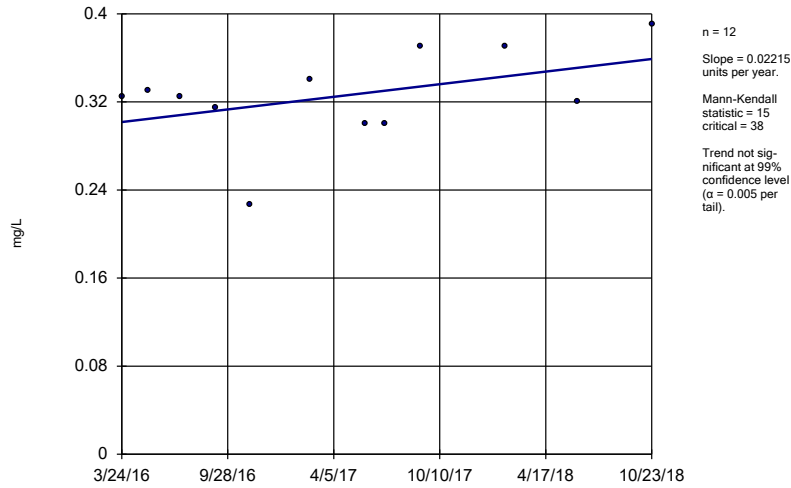
Sen's Slope Estimator GN-GSA-MW-15 (bg)



Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

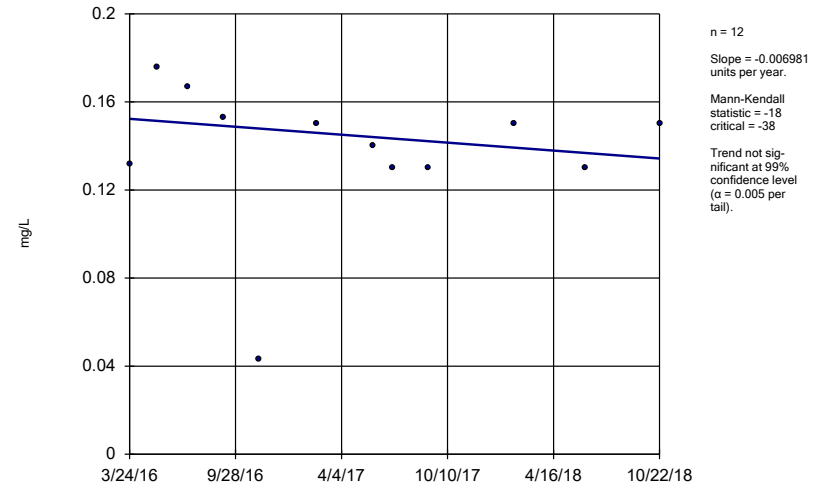
GN-GSA-MW-1



Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

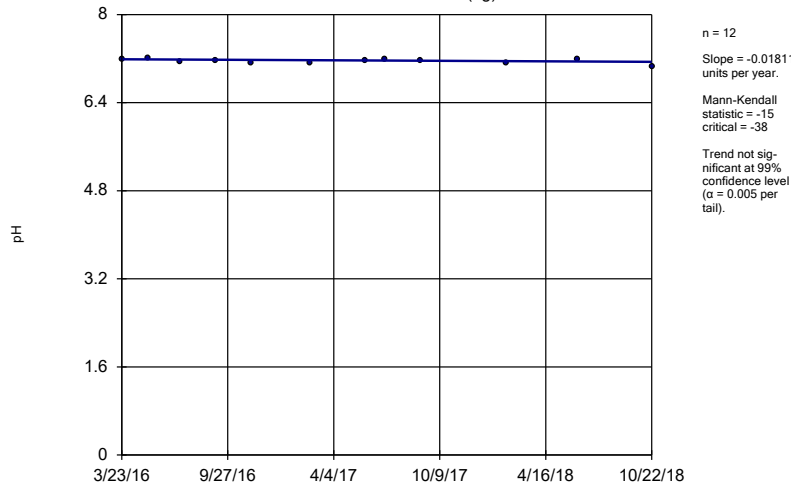
GN-GSA-MW-8



Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

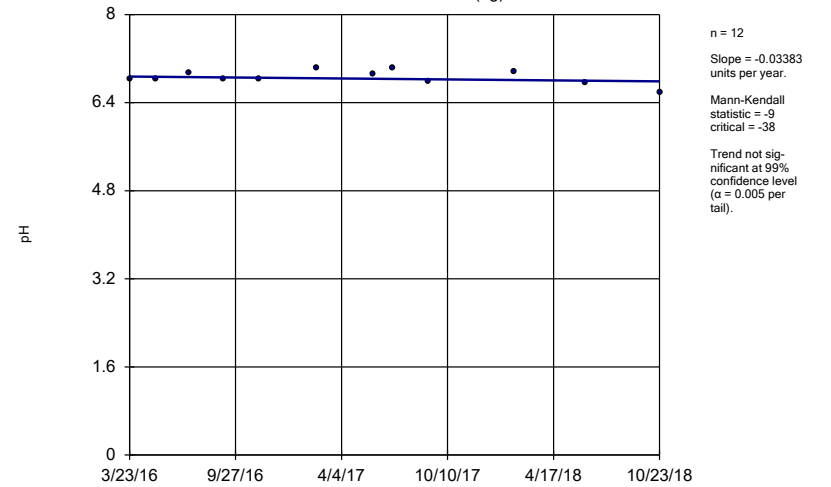
GN-GSA-MW-2 (bg)



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

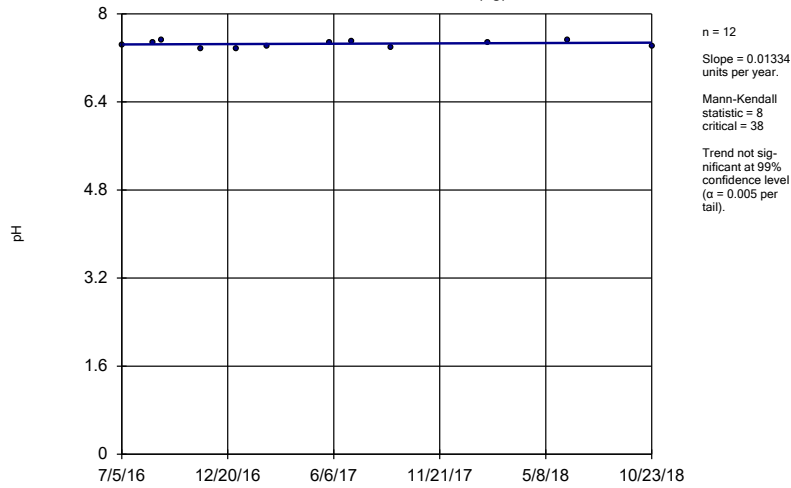
GN-GSA-MW-3 (bg)



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

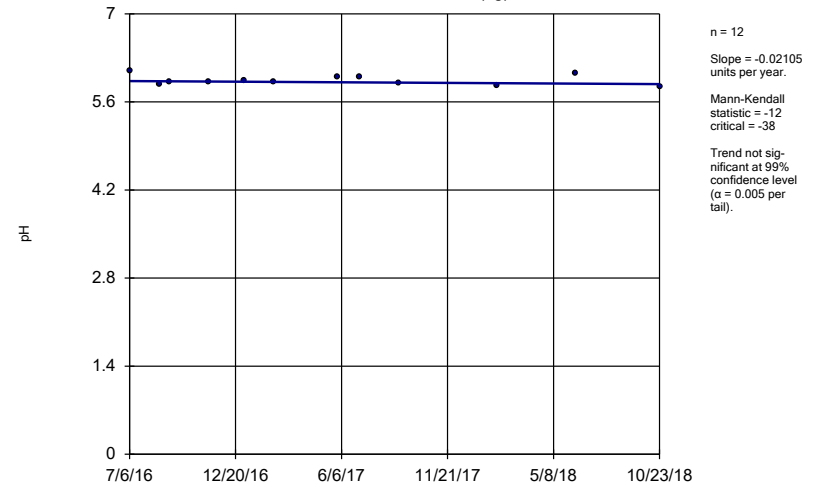
GN-GSA-MW-14S (bg)



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

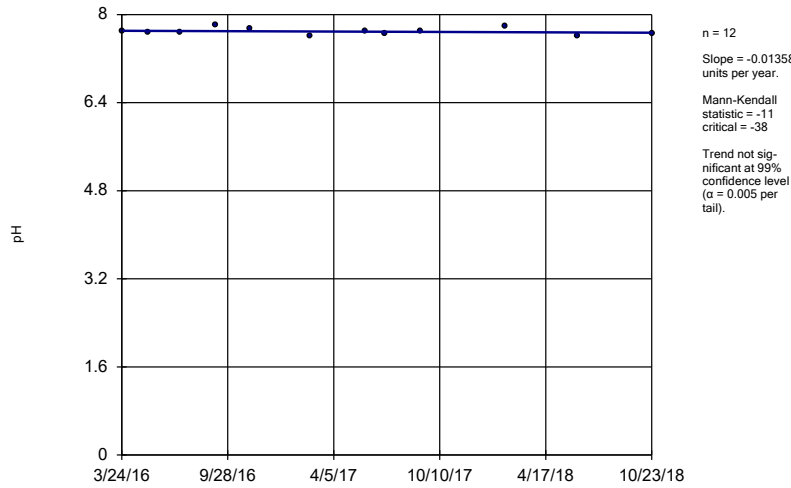
GN-GSA-MW-15 (bg)



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

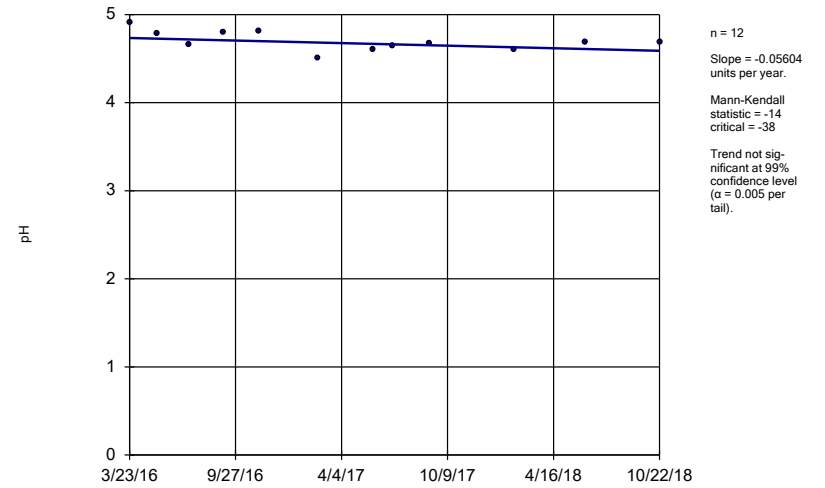
GN-GSA-MW-1



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

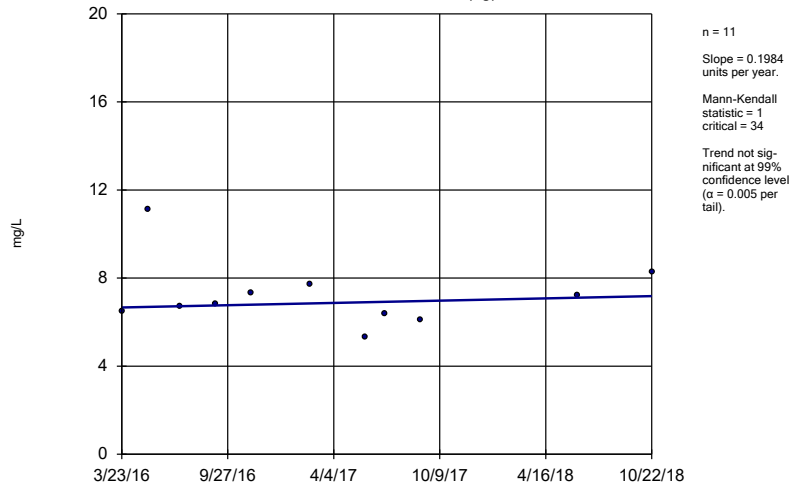
GN-GSA-MW-6



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

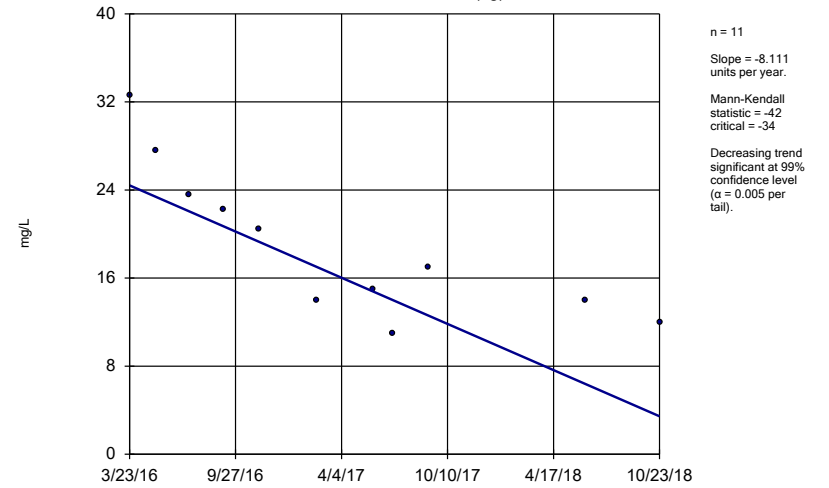
GN-GSA-MW-2 (bg)



Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

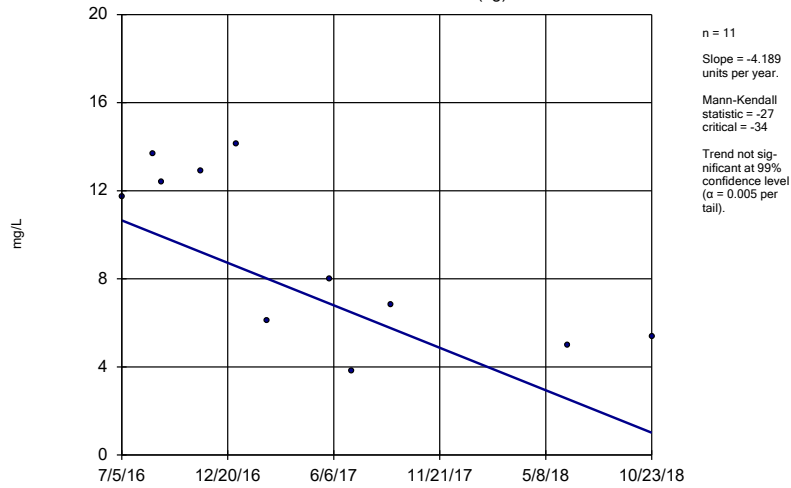
GN-GSA-MW-3 (bg)



Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

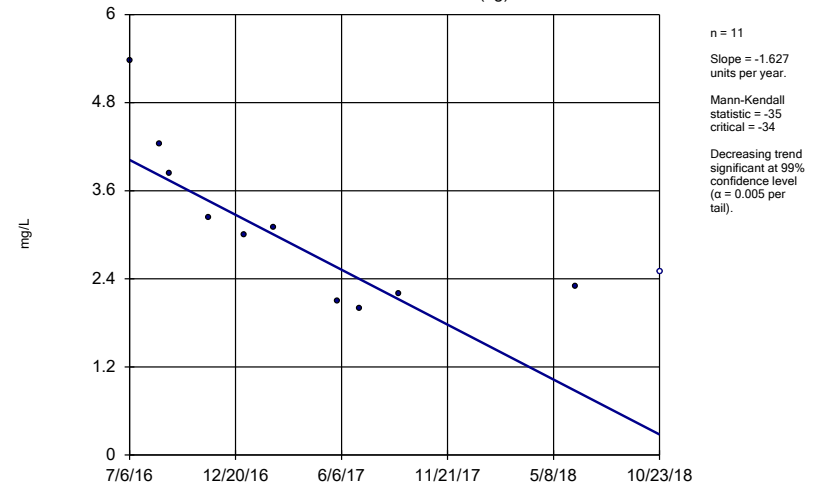
GN-GSA-MW-14S (bg)



Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

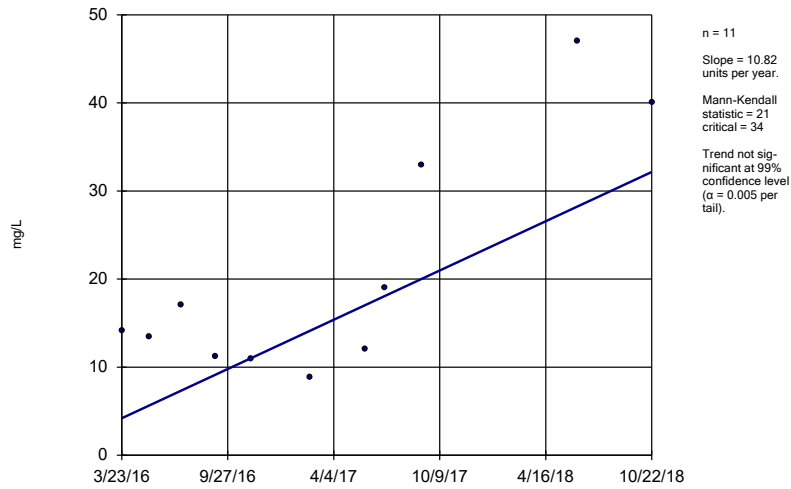
Sen's Slope Estimator

GN-GSA-MW-15 (bg)



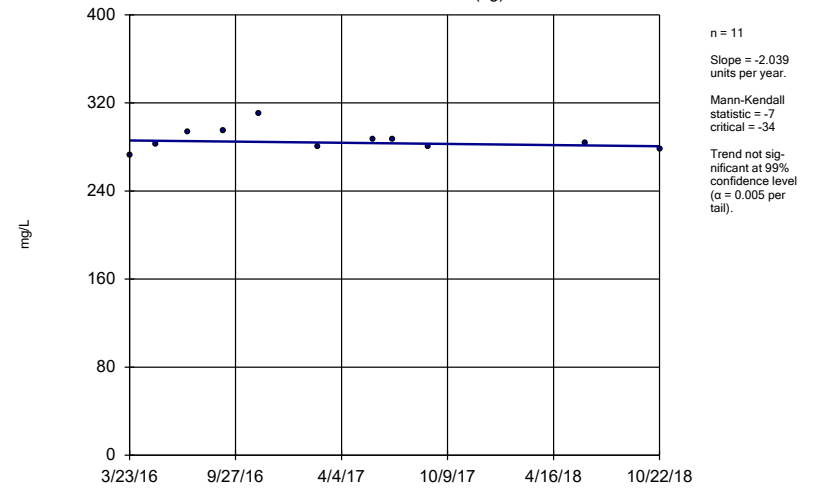
Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator
GN-GSA-MW-5



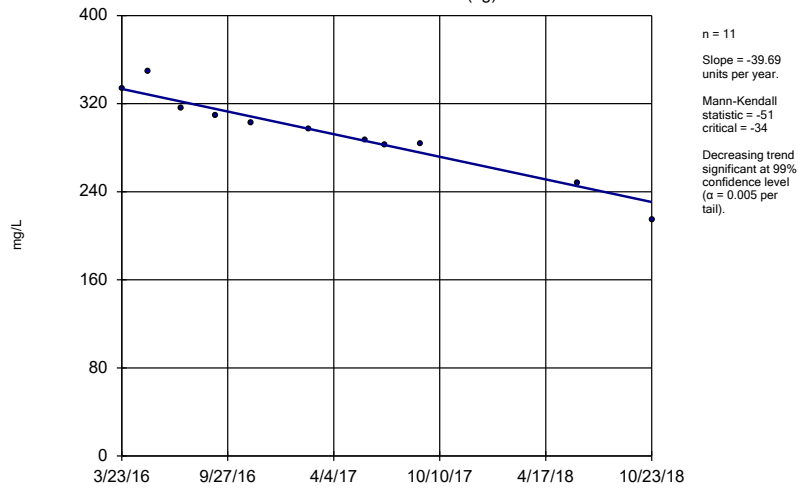
Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator
GN-GSA-MW-2 (bg)



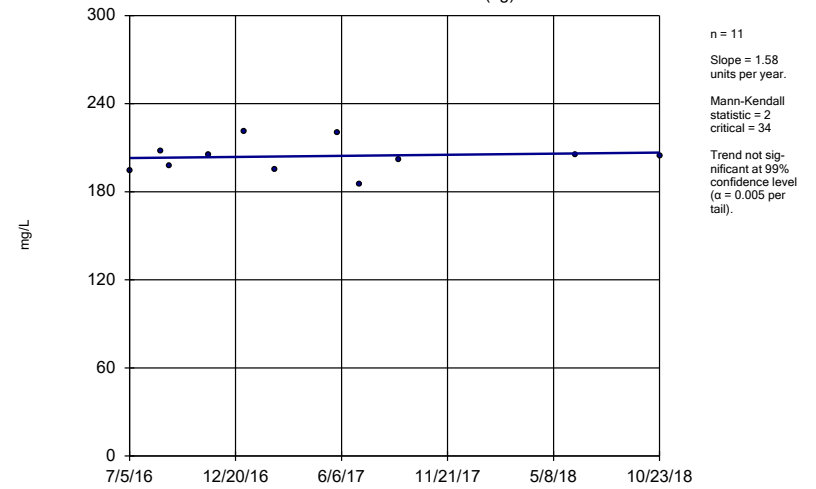
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator
GN-GSA-MW-3 (bg)



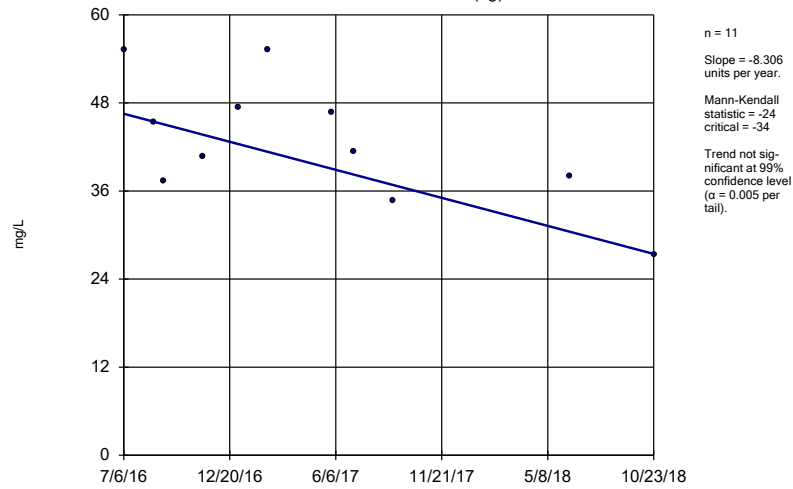
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator
GN-GSA-MW-14S (bg)



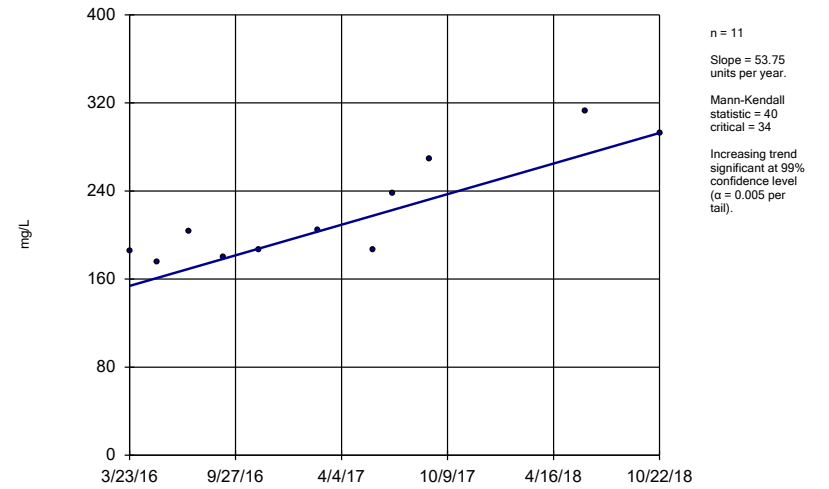
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-15 (bg)



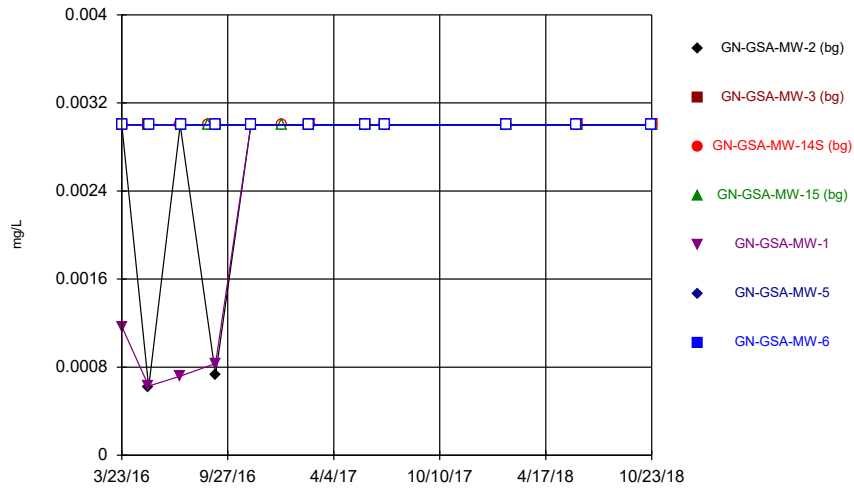
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-5



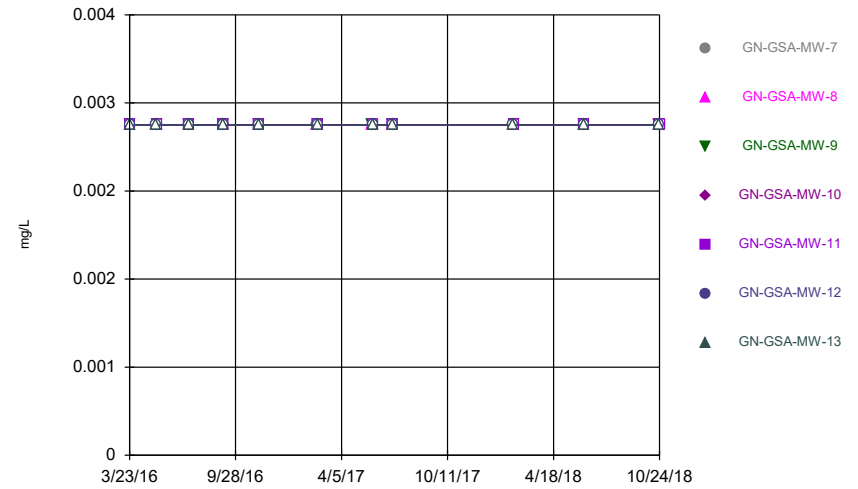
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



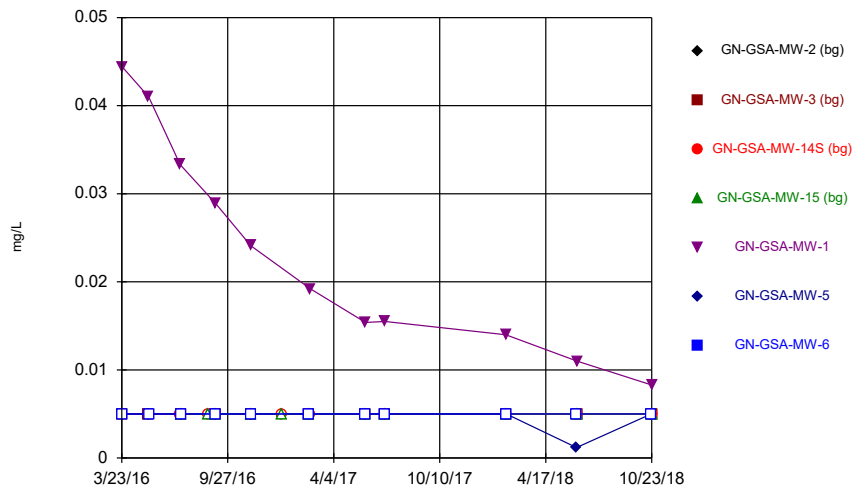
Constituent: Antimony Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



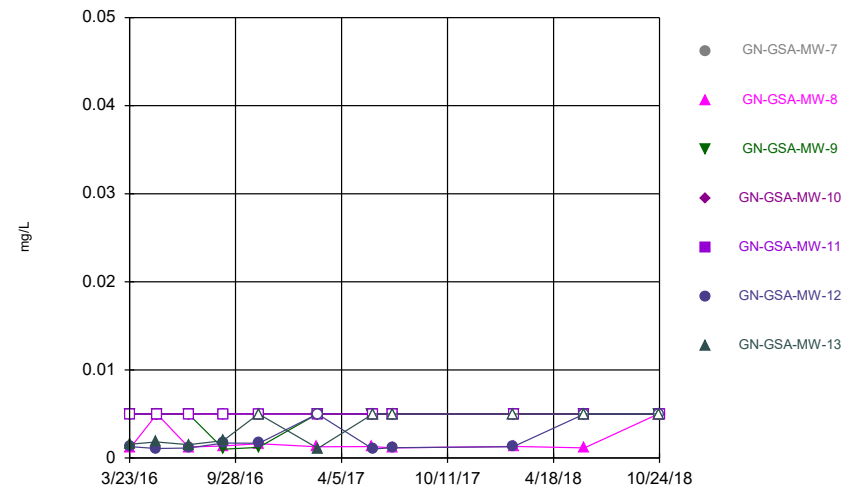
Constituent: Antimony Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



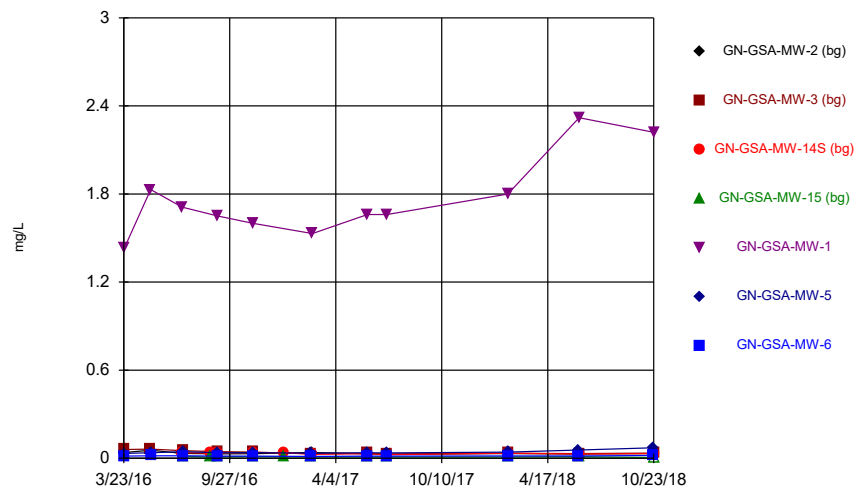
Constituent: Arsenic Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series

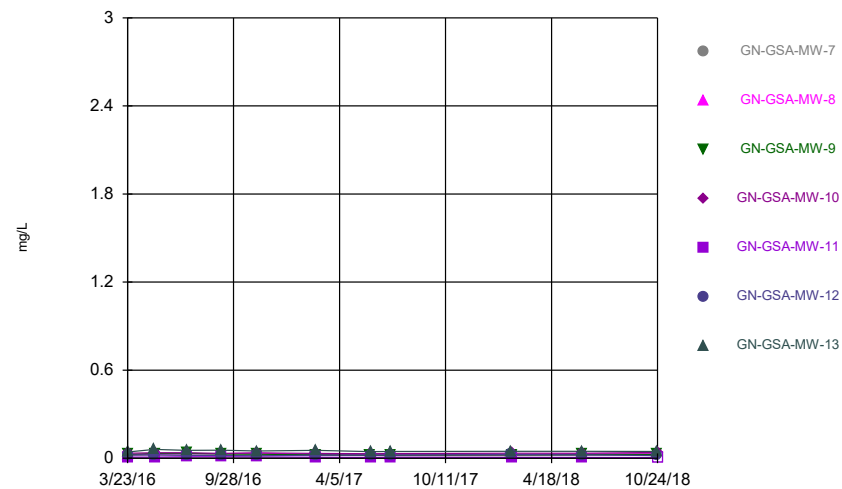


Constituent: Arsenic Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

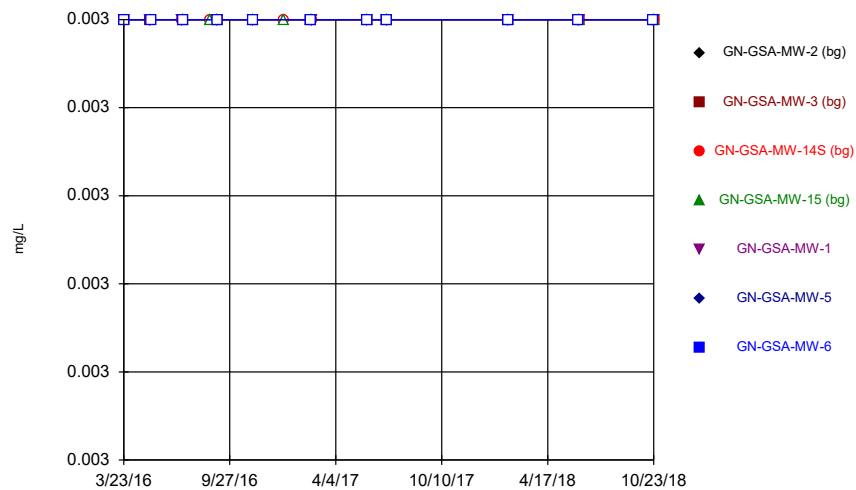
Time Series



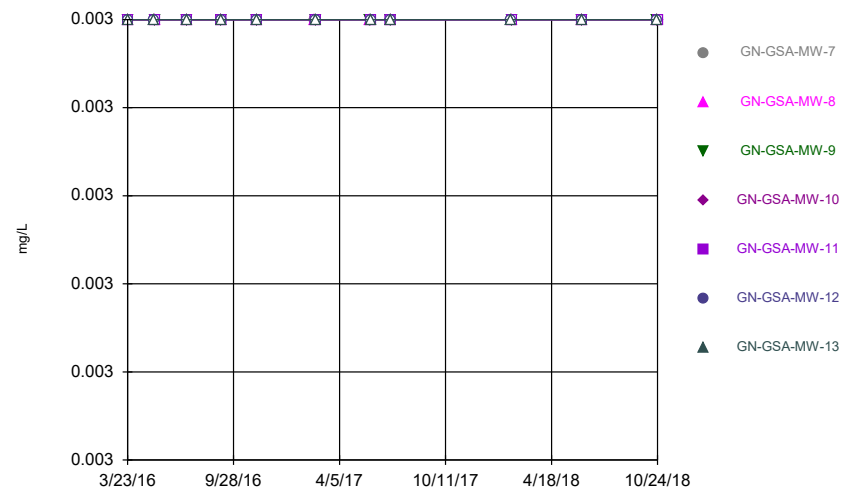
Time Series



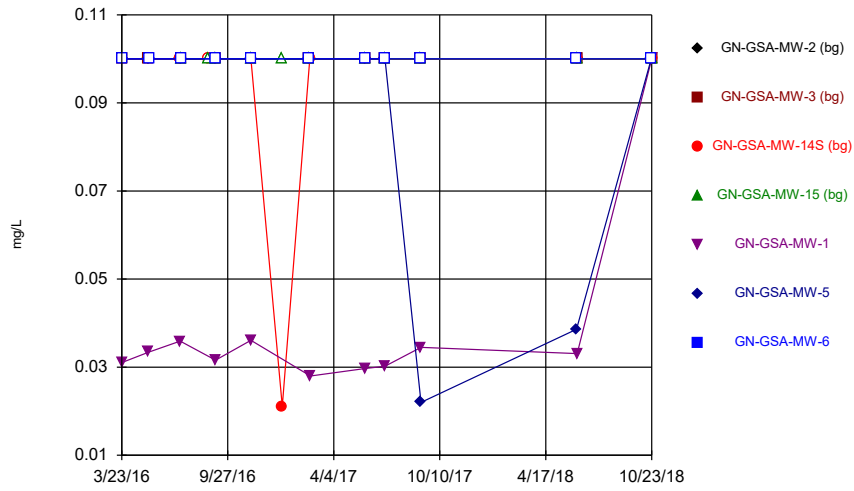
Time Series



Time Series

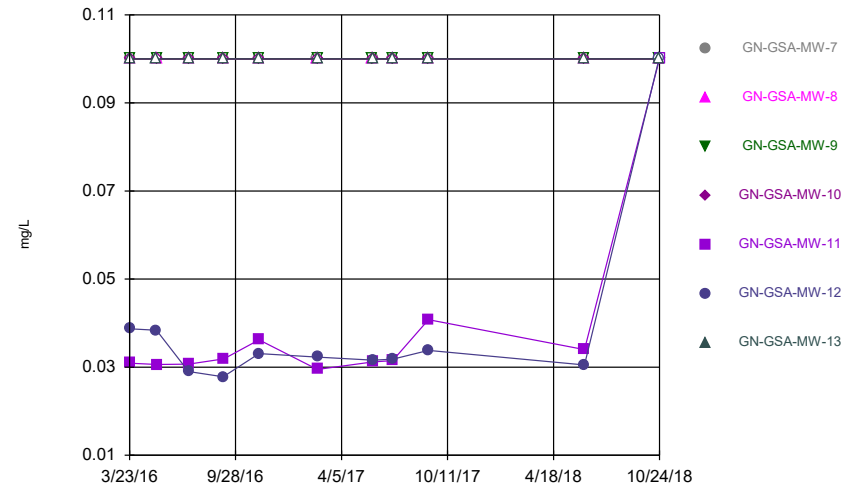


Time Series



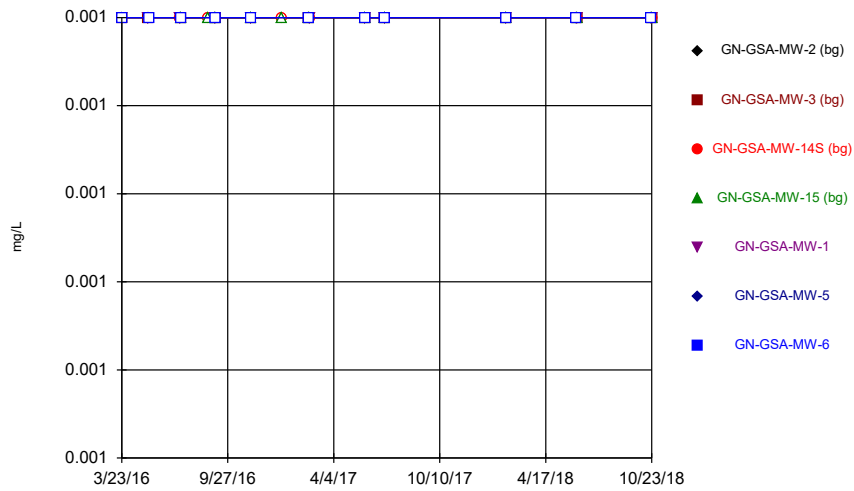
Constituent: Boron Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



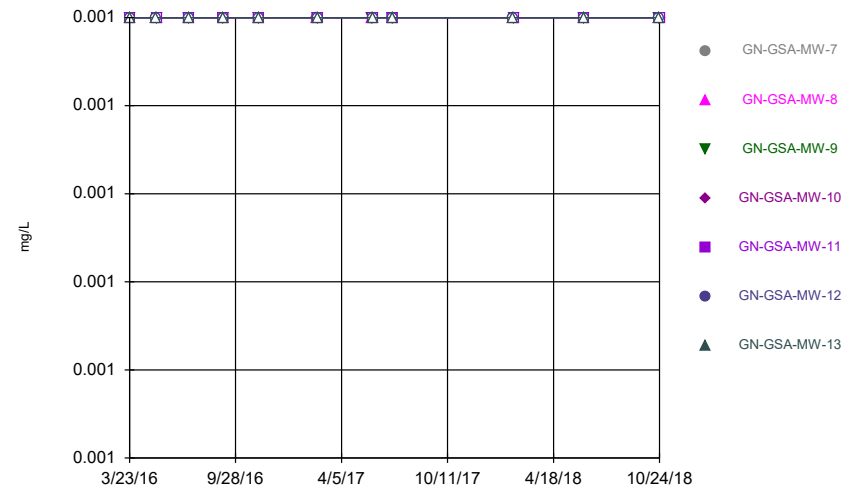
Constituent: Boron Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



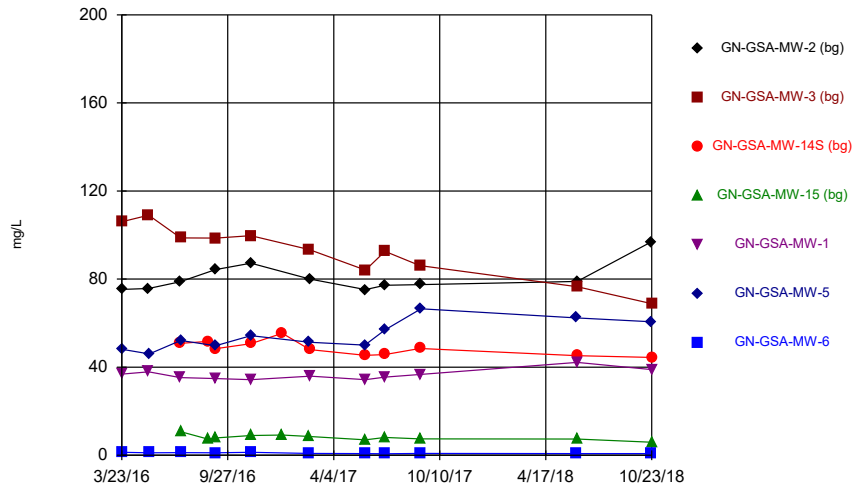
Constituent: Cadmium Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



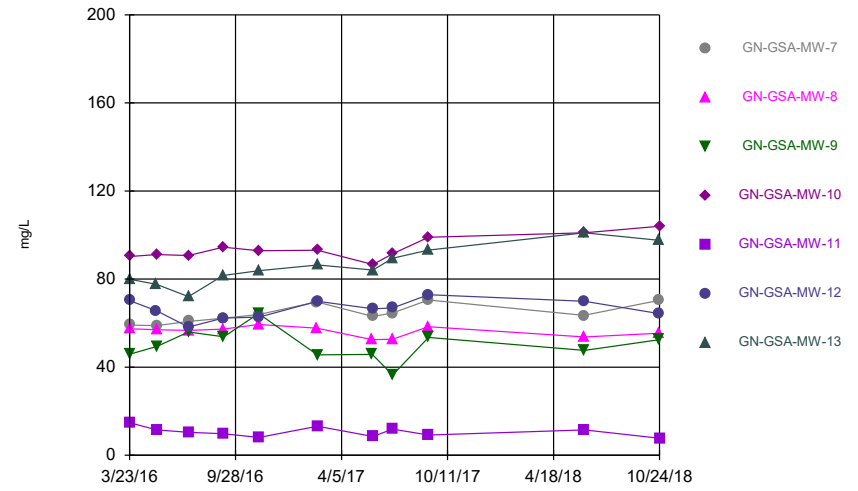
Constituent: Cadmium Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



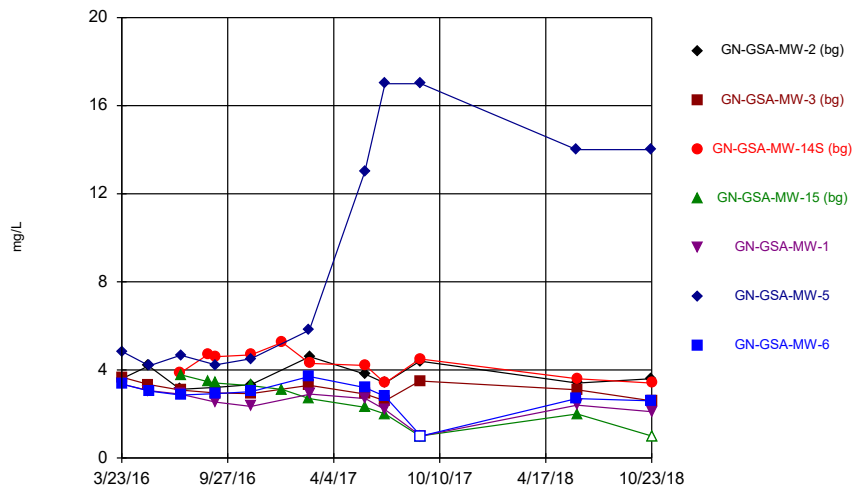
Constituent: Calcium Analysis Run 12/18/2018 2:11 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



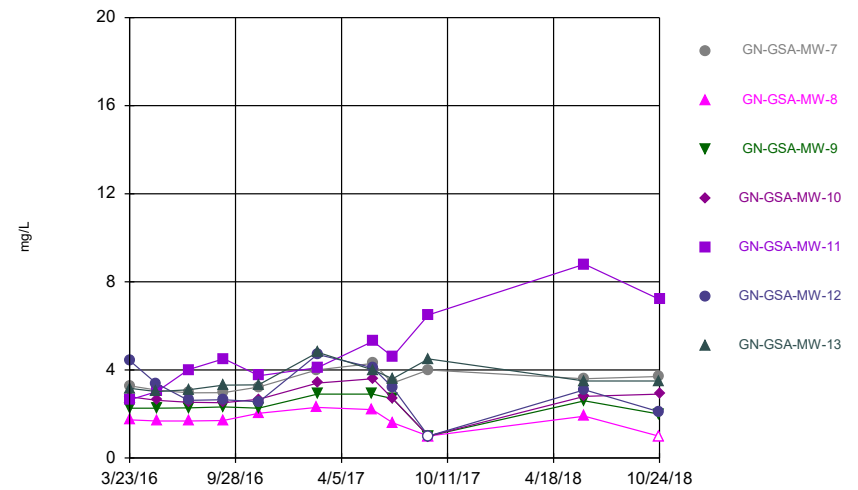
Constituent: Calcium Analysis Run 12/18/2018 2:11 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



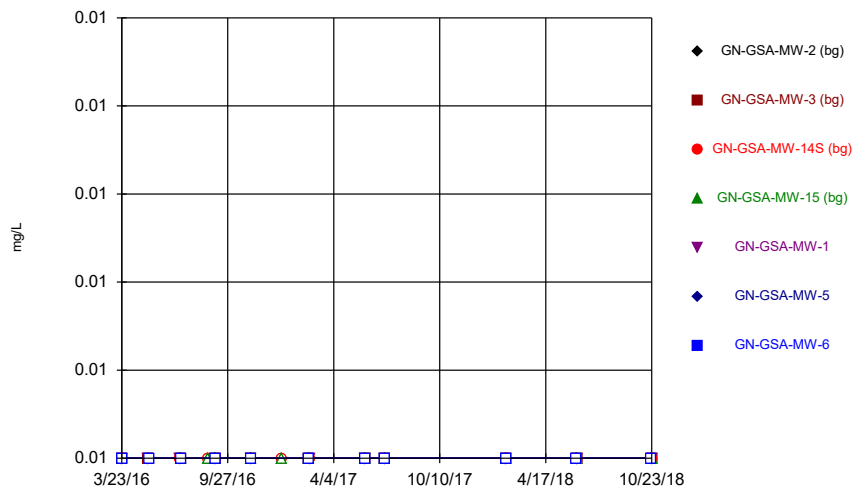
Constituent: Chloride Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



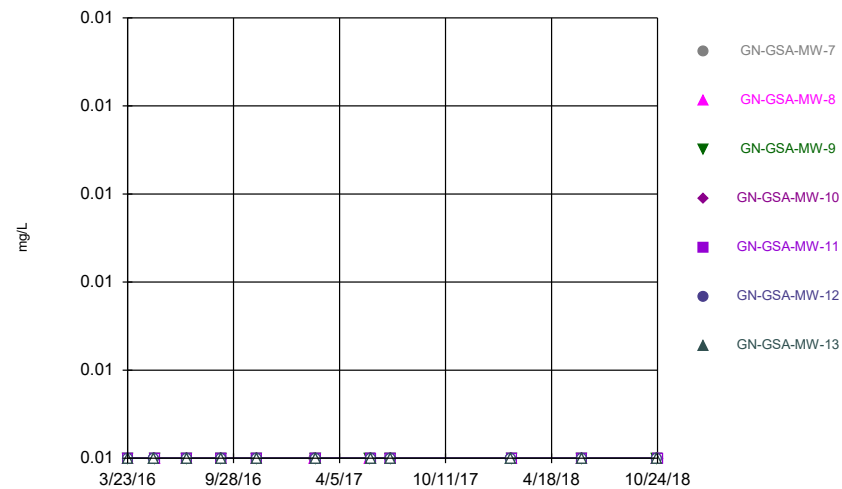
Constituent: Chloride Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



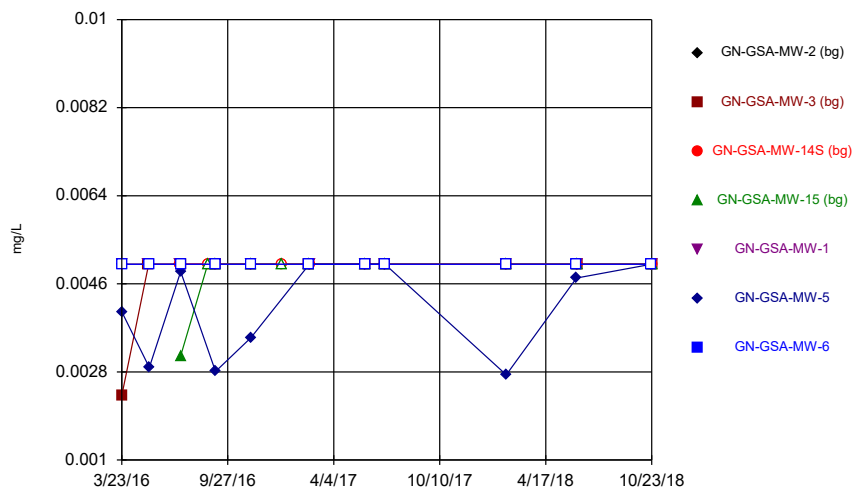
Constituent: Chromium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



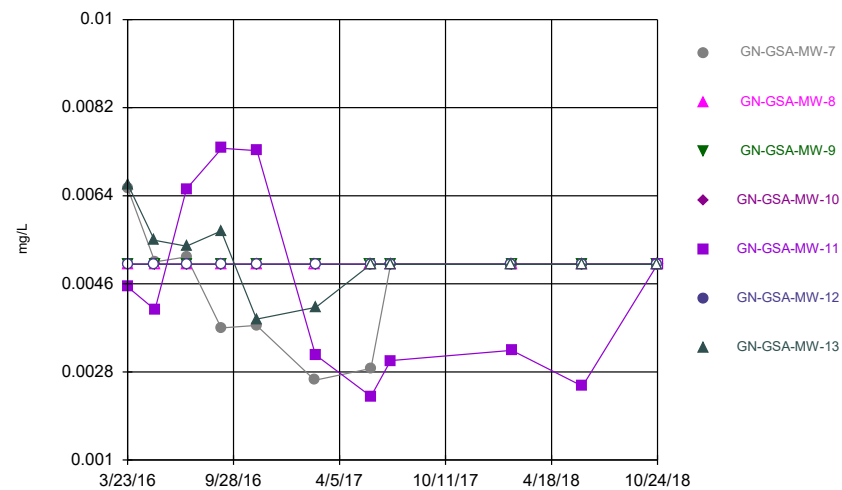
Constituent: Chromium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



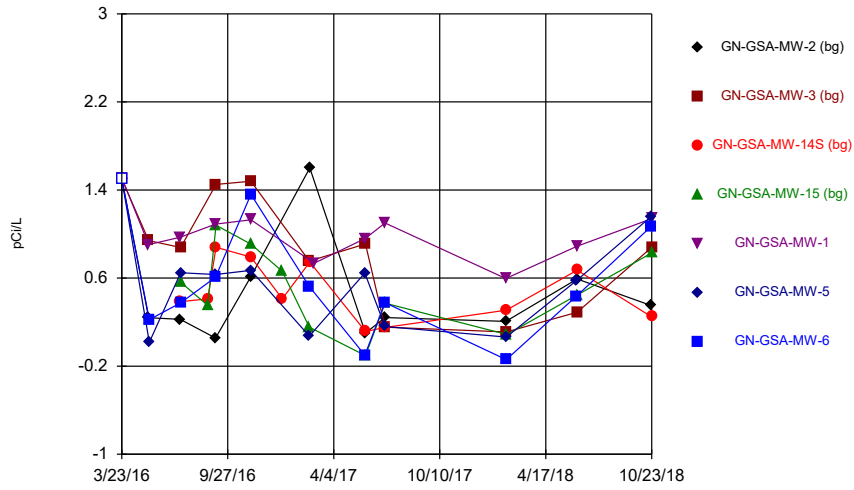
Constituent: Cobalt Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



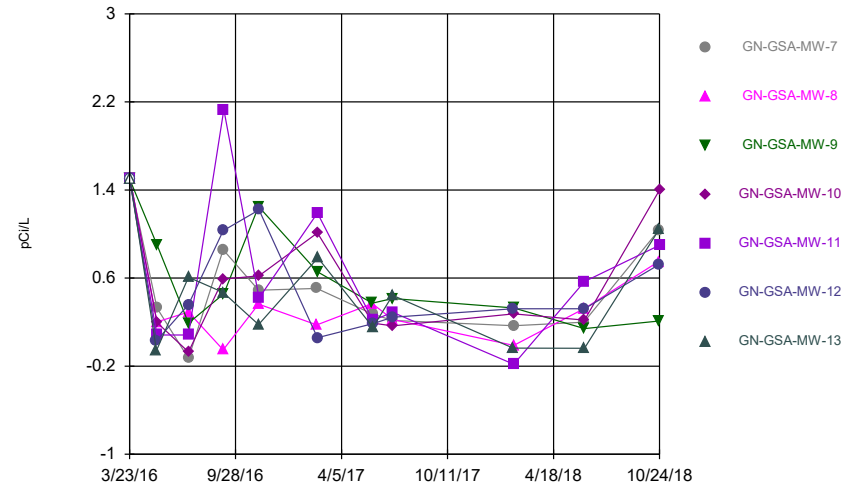
Constituent: Cobalt Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



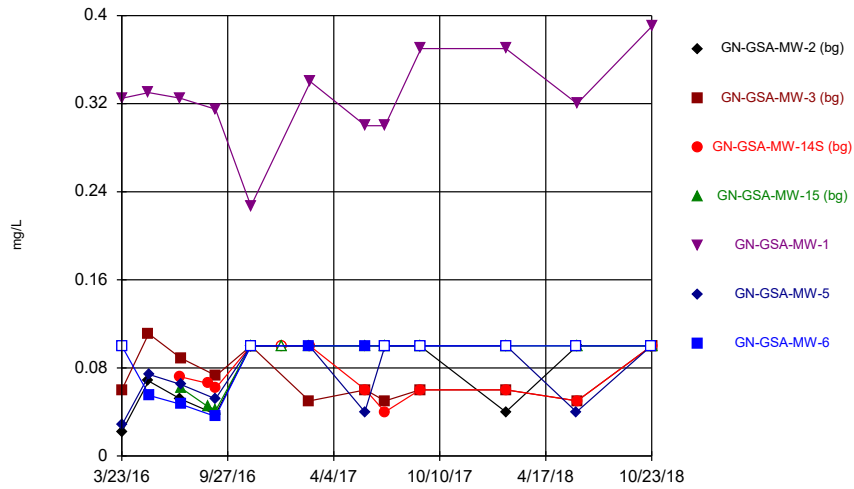
Constituent: Combined Radium 226 + 228 Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



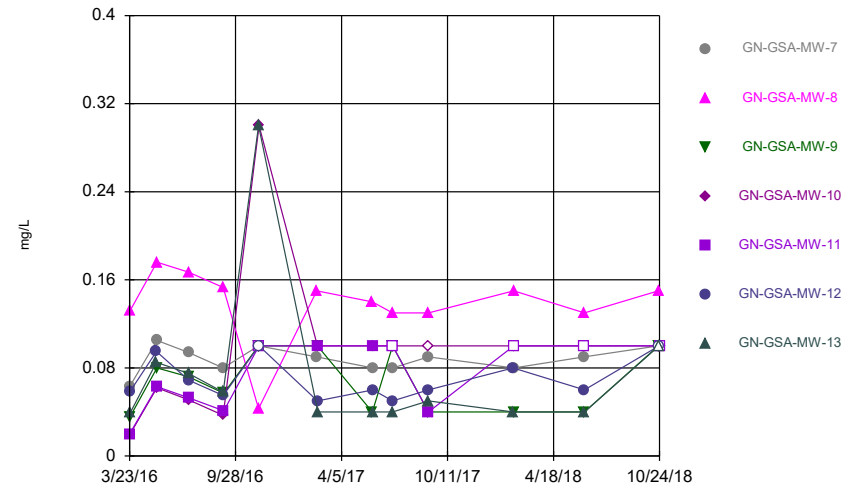
Constituent: Combined Radium 226 + 228 Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



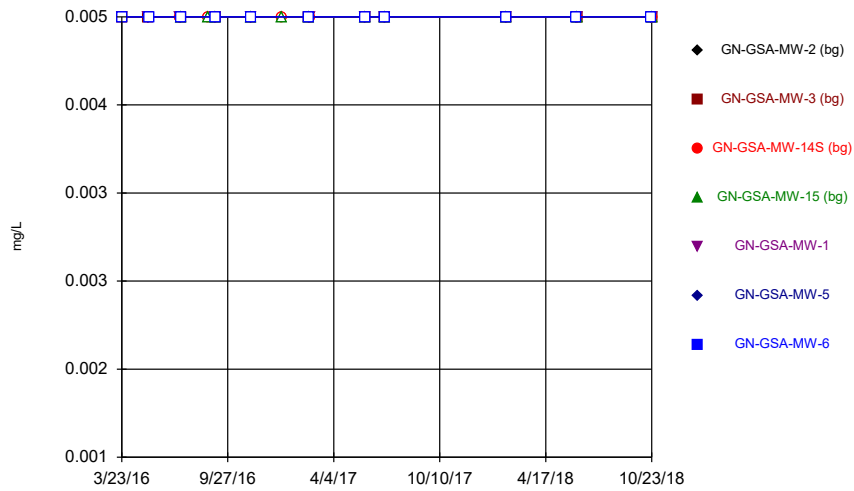
Constituent: Fluoride Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



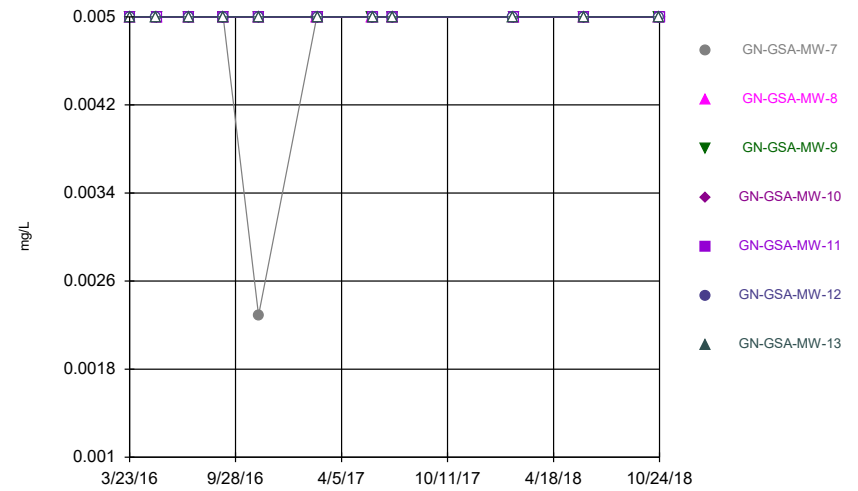
Constituent: Fluoride Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



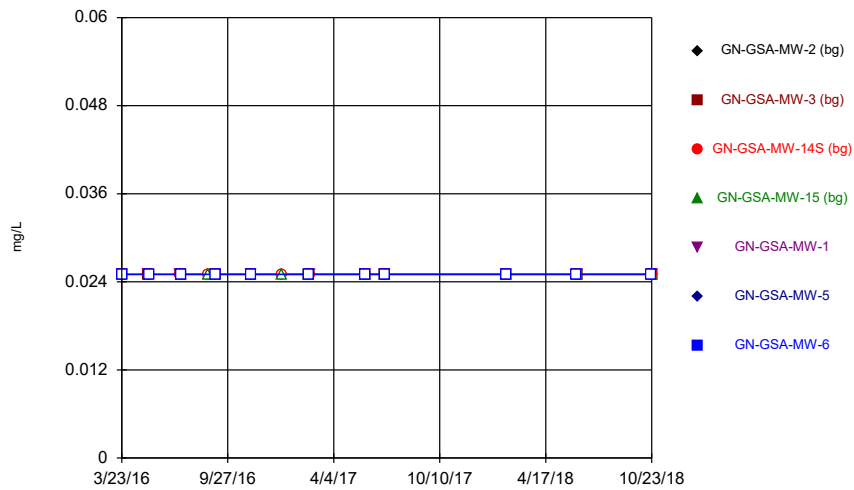
Constituent: Lead Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



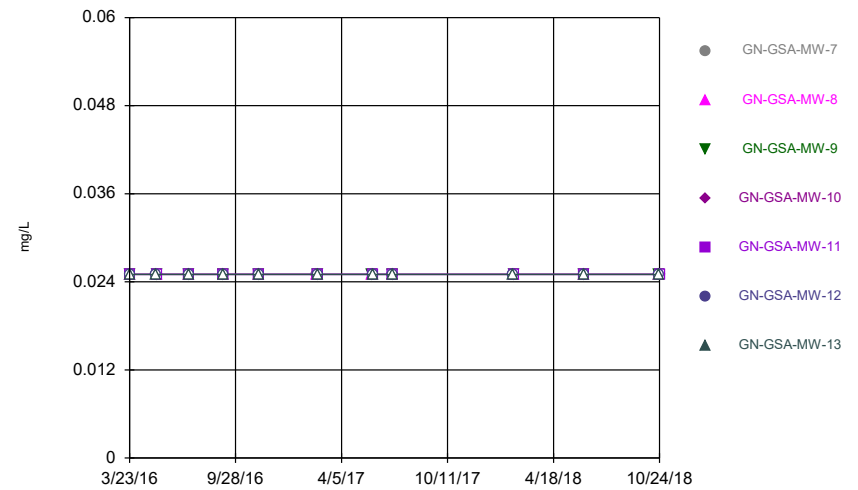
Constituent: Lead Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



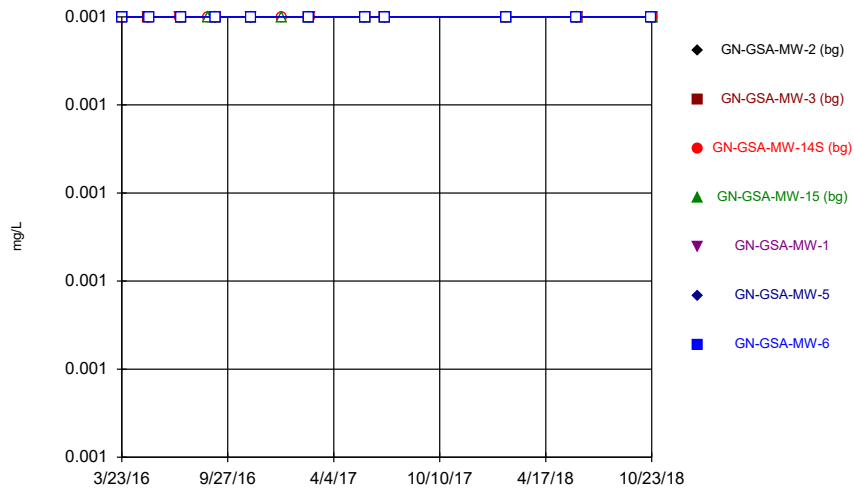
Constituent: Lithium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



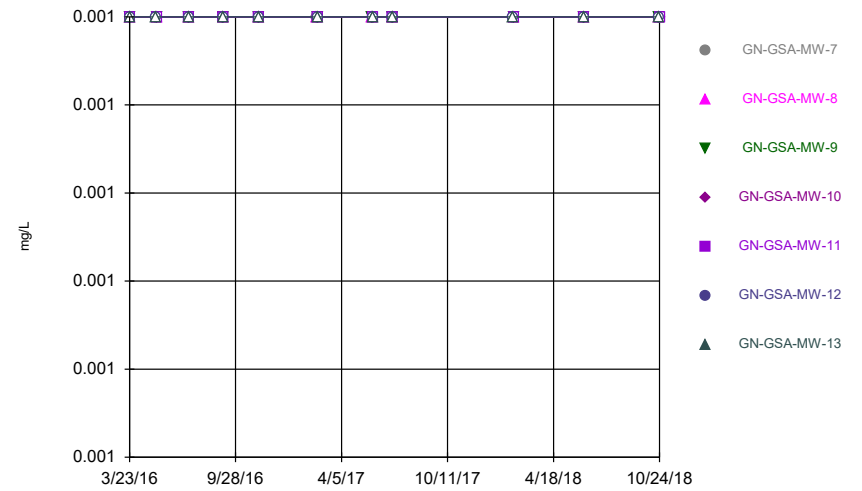
Constituent: Lithium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



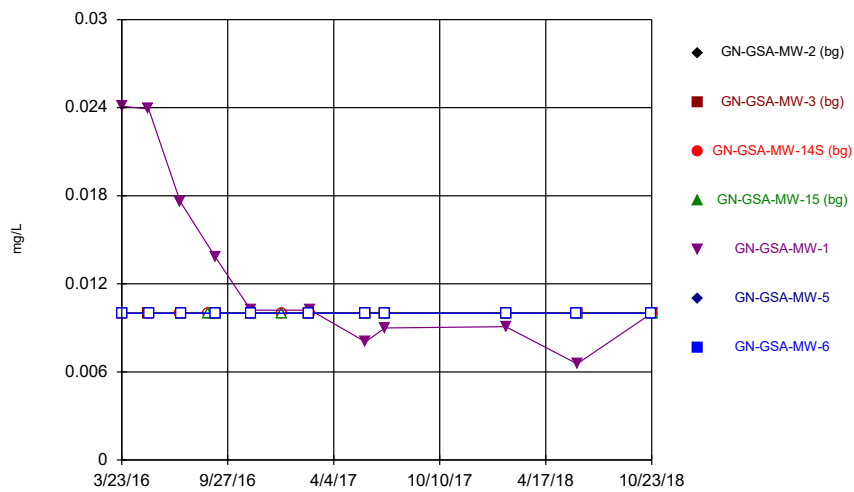
Constituent: Mercury Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



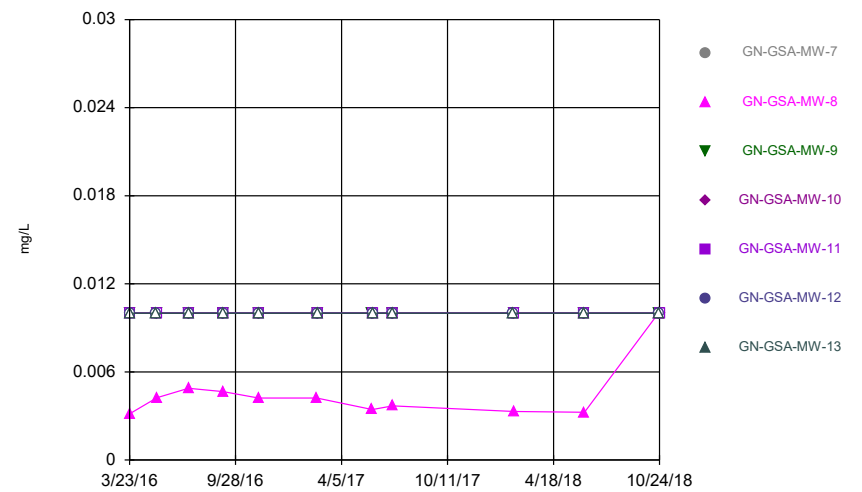
Constituent: Mercury Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



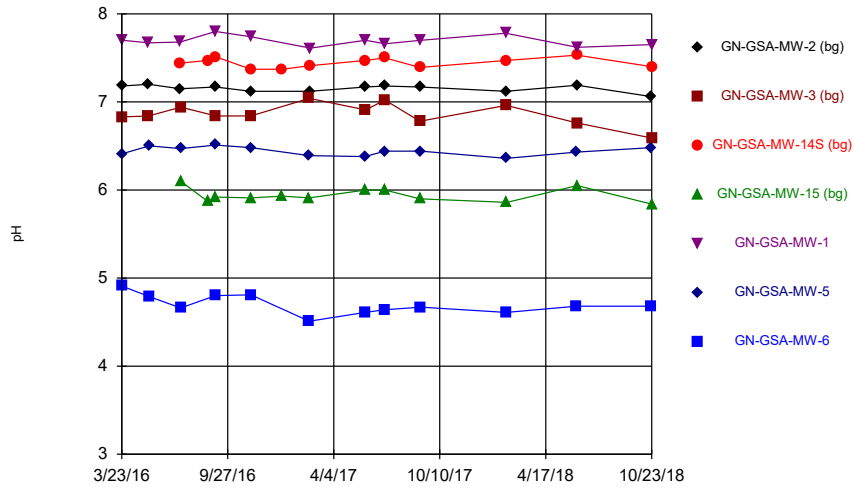
Constituent: Molybdenum Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



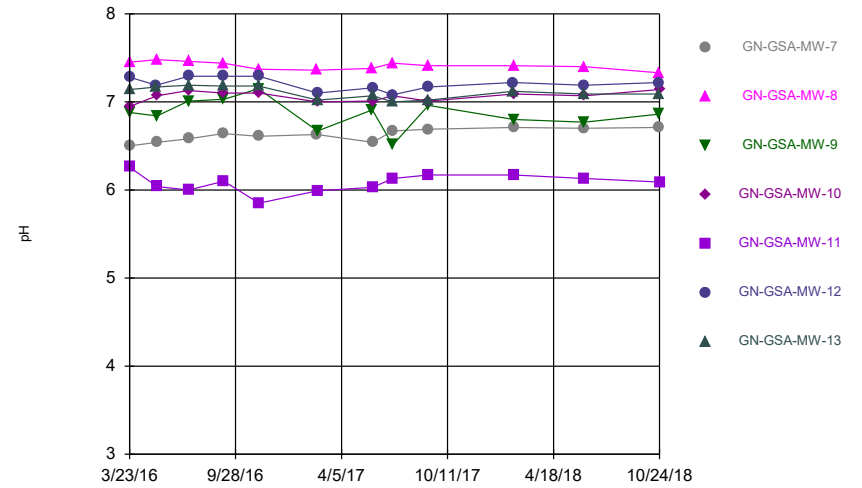
Constituent: Molybdenum Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



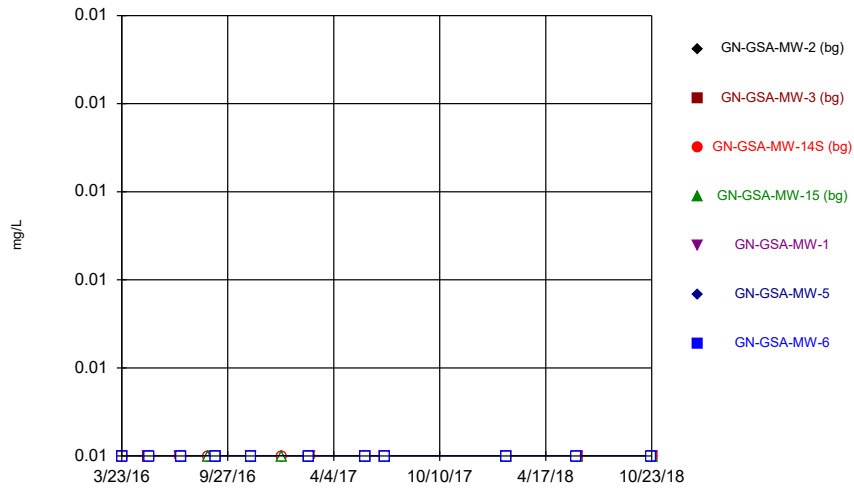
Constituent: pH Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



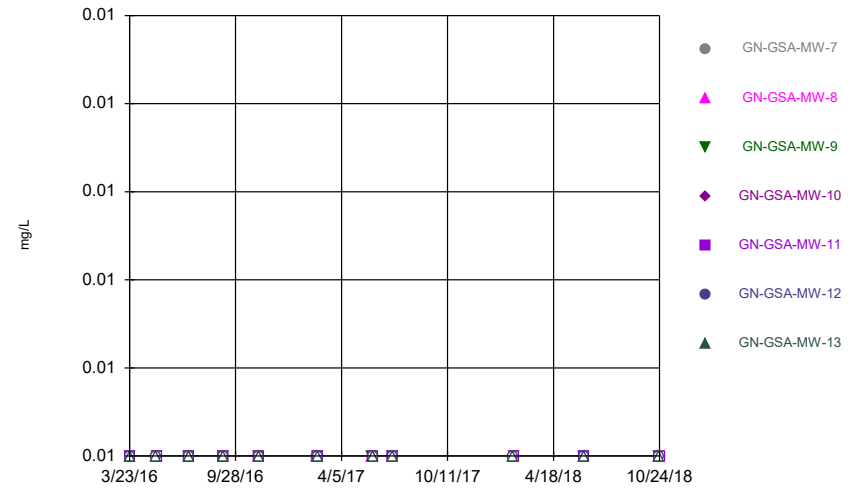
Constituent: pH Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



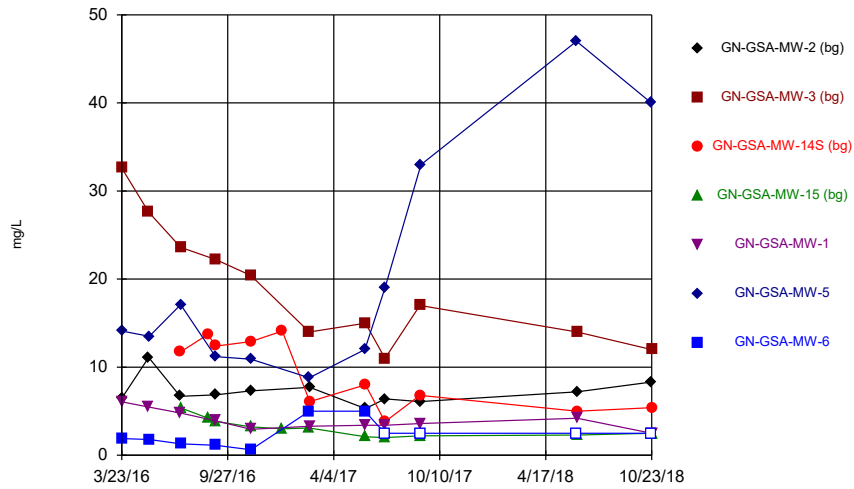
Constituent: Selenium Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



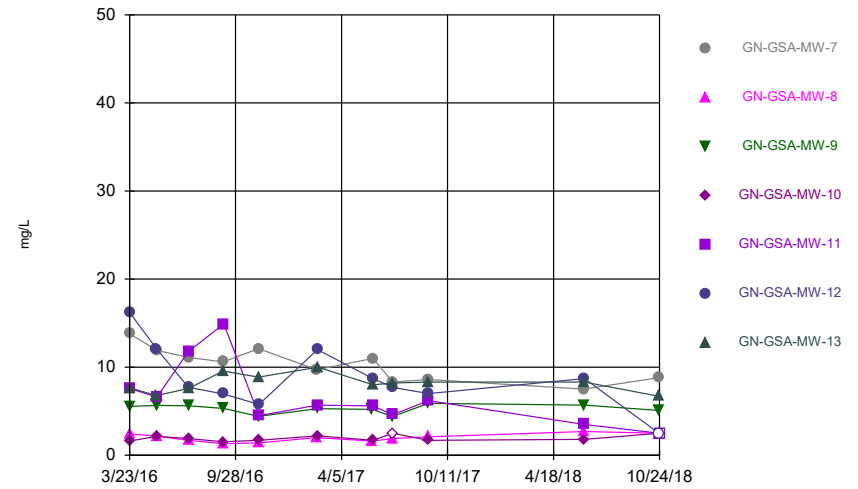
Constituent: Selenium Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



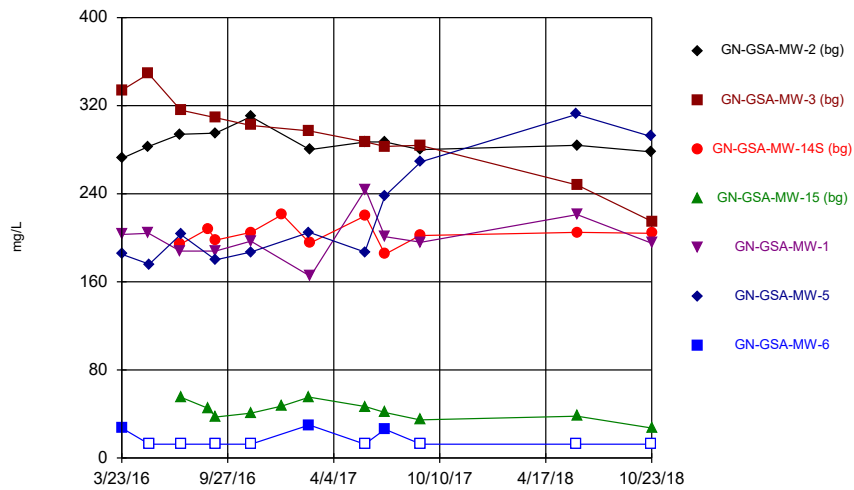
Constituent: Sulfate Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



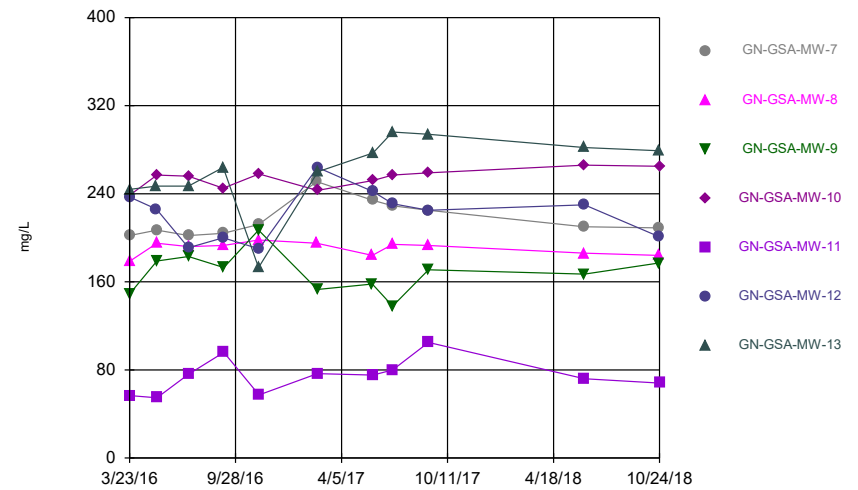
Constituent: Sulfate Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



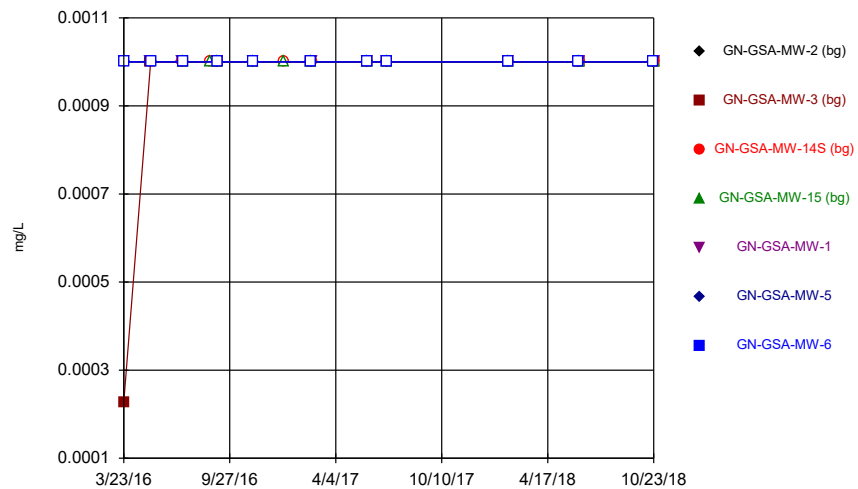
Constituent: TDS Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



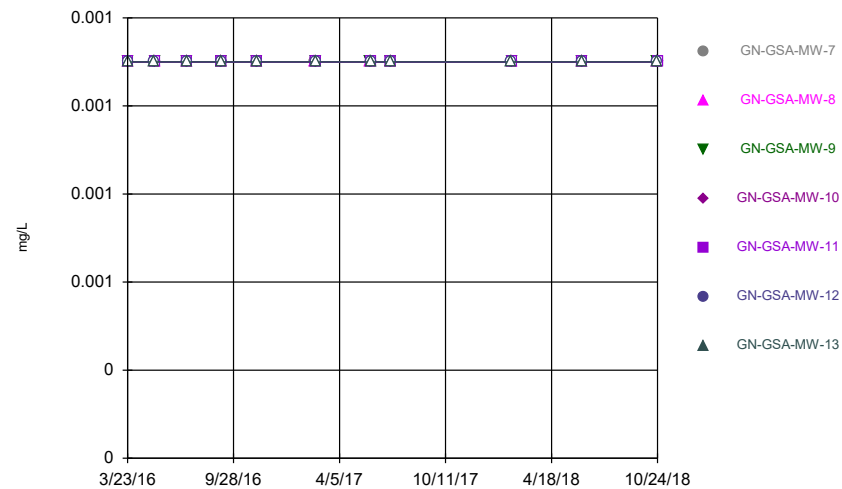
Constituent: TDS Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



Constituent: Thallium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



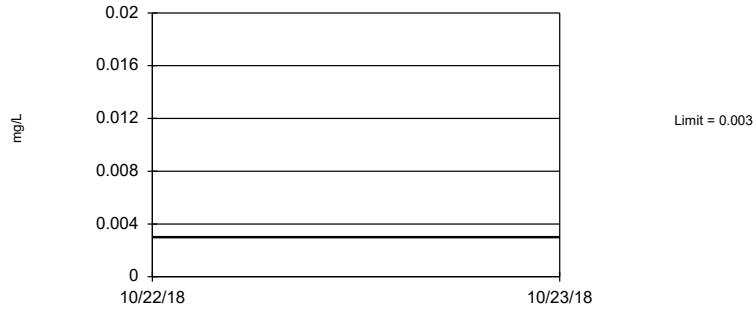
Constituent: Thallium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Upper Tolerance Limits - App IV

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/14/2019, 8:24 AM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	44	n/a	n/a	95.45	n/a	n/a	0.1047	NP Inter(NDs)
Arsenic (mg/L)	0.005	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Barium (mg/L)	0.0622	44	n/a	n/a	2.273	n/a	n/a	0.1047	NP Inter(normal...
Beryllium (mg/L)	0.003	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Boron (mg/L)	0.1	44	n/a	n/a	97.73	n/a	n/a	0.1047	NP Inter(NDs)
Cadmium (mg/L)	0.001	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Chromium (mg/L)	0.01	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Cobalt (mg/L)	0.01	44	n/a	n/a	95.45	n/a	n/a	0.1047	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.6	44	n/a	n/a	4.545	n/a	n/a	0.1047	NP Inter(normal...
Fluoride (mg/L)	0.3	48	n/a	n/a	35.42	n/a	n/a	0.08526	NP Inter(normal...
Lead (mg/L)	0.005	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Lithium (mg/L)	0.02	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Mercury (mg/L)	0.0005	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Molybdenum (mg/L)	0.01	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Selenium (mg/L)	0.01	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Thallium (mg/L)	0.001	44	n/a	n/a	97.73	n/a	n/a	0.1047	NP Inter(NDs)

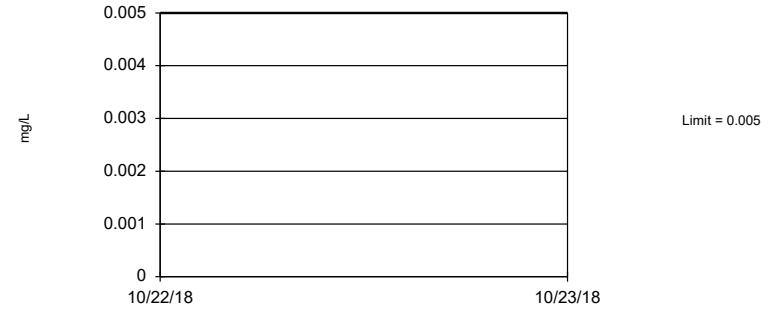
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 44 background values. 95.45% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Antimony Analysis Run 1/14/2019 8:22 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

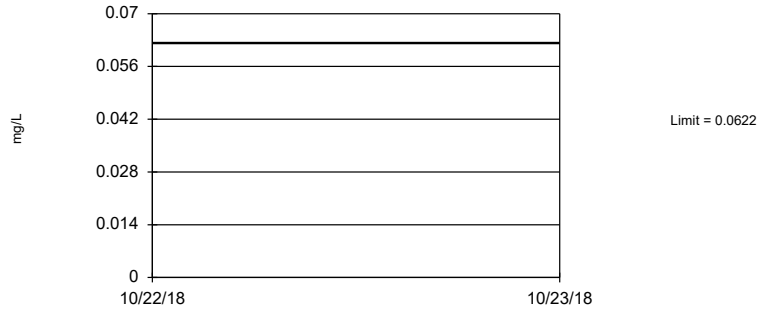
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Arsenic Analysis Run 1/14/2019 8:22 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

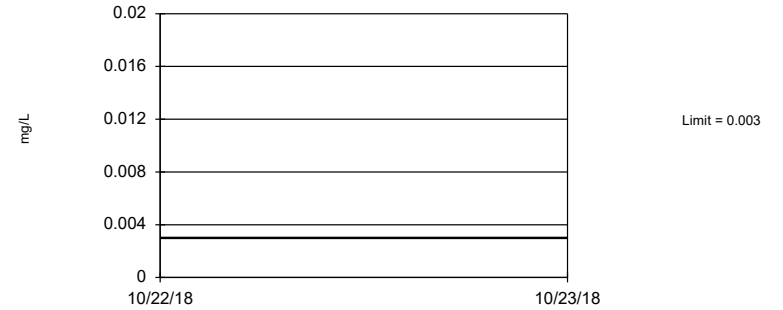
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 2.273% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Barium Analysis Run 1/14/2019 8:22 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

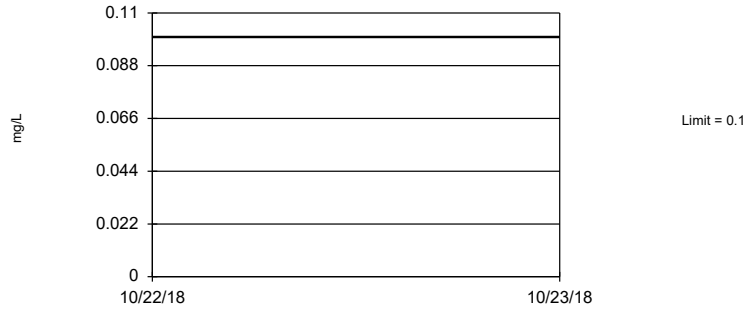
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Beryllium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 44 background values. 97.73% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Boron Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Cadmium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

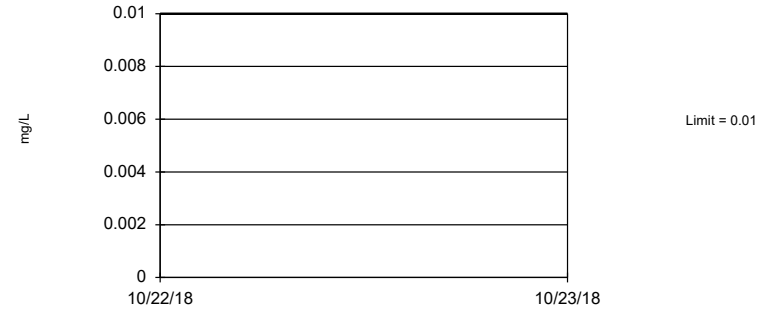
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Chromium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 44 background values. 95.45% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Cobalt Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

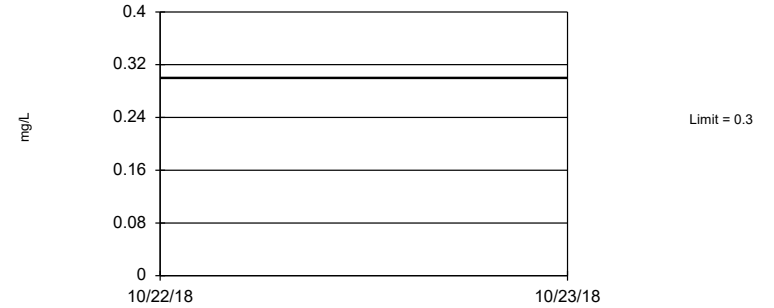
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 4.545% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Combined Radium 226 + 228 Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. 35.42% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Fluoride Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

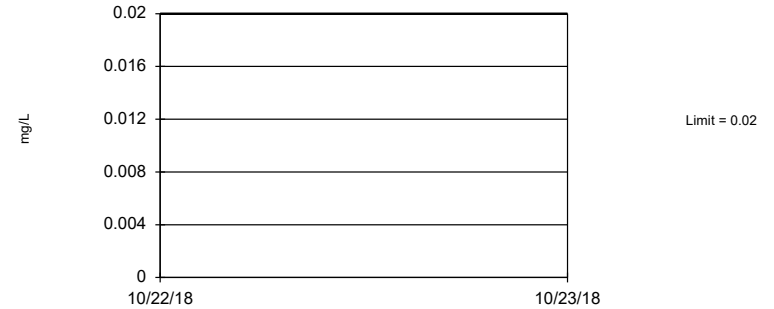
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Lead Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

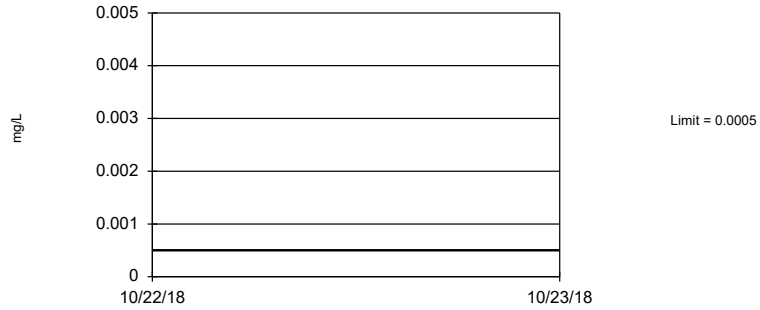
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Lithium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

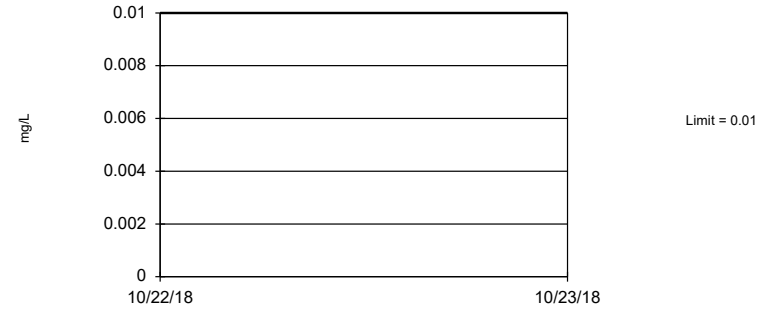
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Mercury Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Molybdenum Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Selenium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 44 background values. 97.73% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Thallium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Confidence Intervals - All Results (No Significant Results)

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.0015	0.000629	0.006	No	11	63.64	No	0.006	NP (normality)
Antimony (mg/L)	GN-GSA-MW-5	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-11	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.02424	0.009854	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-5	0.0025	0.00119	0.01	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-6	0.0025	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.0025	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-8	0.0025	0.00112	0.01	No	11	18.18	No	0.006	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-9	0.0025	0.00101	0.01	No	11	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-10	0.0025	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.0025	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-12	0.0025	0.00102	0.01	No	11	27.27	No	0.006	NP (Cohens/xfrm)
Arsenic (mg/L)	GN-GSA-MW-13	0.0025	0.0011	0.01	No	11	54.55	No	0.006	NP (normality)
Barium (mg/L)	GN-GSA-MW-1	1.993	1.536	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-5	0.056	0.0333	2	No	11	0	No	0.006	NP (normality)
Barium (mg/L)	GN-GSA-MW-6	0.01664	0.01405	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-7	0.02172	0.01904	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-8	0.03157	0.02585	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-9	0.03003	0.02291	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-10	0.0369	0.0327	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.008811	0.00596	2	No	11	9.091	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-12	0.02334	0.01915	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.05416	0.04517	2	No	11	0	No	0.01	Param.
Beryllium (mg/L)	GN-GSA-MW-1	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-5	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-6	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-7	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-8	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-9	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-10	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-11	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-12	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-13	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-1	0.0361	0.028	4	No	11	9.091	No	0.006	NP (normality)
Boron (mg/L)	GN-GSA-MW-5	0.05	0.022	4	No	11	81.82	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-6	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-7	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-8	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-9	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-10	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-11	0.0408	0.0295	4	No	11	9.091	No	0.006	NP (normality)
Boron (mg/L)	GN-GSA-MW-12	0.03912	0.02932	4	No	11	9.091	sqrt(x)	0.01	Param.
Boron (mg/L)	GN-GSA-MW-13	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-5	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-9	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)

Confidence Intervals - All Results (No Significant Results)

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	GN-GSA-MW-12	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-1	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.005	0.0025	0.01	No	11	36.36	No	0.006	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-6	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-7	0.01104	0.003631	0.01	No	11	36.36	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-8	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-9	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-10	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.005716	0.002662	0.01	No	11	9.091	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-12	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-13	0.01227	0.005189	0.01	No	11	45.45	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.199	0.8042	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	0.9511	0.1666	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	1.016	0.1168	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.8824	0.1065	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.748	-0.0526	5	No	11	9.091	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	0.9601	0.2081	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	0.9964	0.112	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.242	0.06572	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	0.9607	0.1291	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	0.8734	0.04335	5	No	11	9.091	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-1	0.359	0.293	4	No	12	0	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-5	0.1	0.04	4	No	12	41.67	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-6	0.15	0.047	4	No	12	58.33	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-7	0.1067	0.07603	4	No	12	8.333	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1601	0.1194	4	No	12	0	x^2	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.1	0.035	4	No	12	25	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-10	0.1	0.037	4	No	12	41.67	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-11	0.1	0.04	4	No	12	41.67	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-12	0.095	0.05	4	No	12	16.67	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.085	0.039	4	No	12	8.333	No	0.01	NP (normality)
Lead (mg/L)	GN-GSA-MW-1	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-5	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-7	0.0025	0.00229	0.015	No	11	90.91	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-8	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-9	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-10	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-11	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-12	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-5	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-6	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-7	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-8	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-9	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-10	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-11	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-12	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-13	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-1	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-5	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-6	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-7	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-8	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-9	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-10	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-11	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-12	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-13	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-1	0.01801	0.006982	0.1	No	11	9.091	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-5	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-6	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-7	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-8	0.004568	0.003448	0.1	No	11	9.091	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)

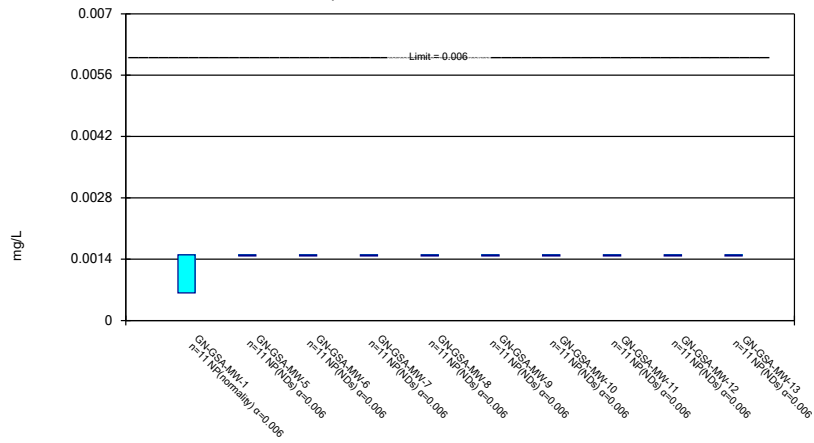
Confidence Intervals - All Results (No Significant Results)

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Molybdenum (mg/L)	GN-GSA-MW-10	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-11	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-12	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-13	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-1	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-5	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-6	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-7	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-8	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-9	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-10	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-11	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-12	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-13	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)

Non-Parametric Confidence Interval

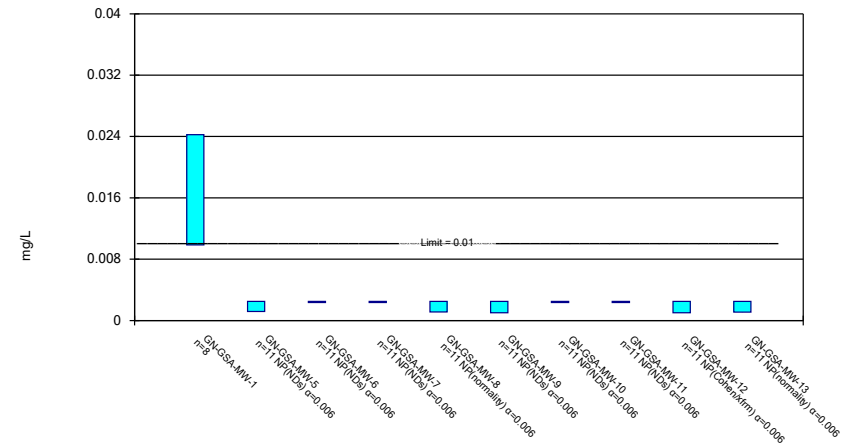
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Parametric and Non-Parametric (NP) Confidence Interval

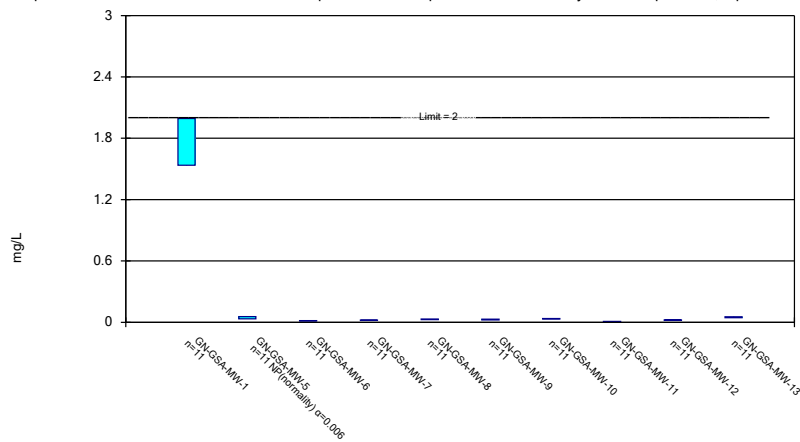
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Parametric and Non-Parametric (NP) Confidence Interval

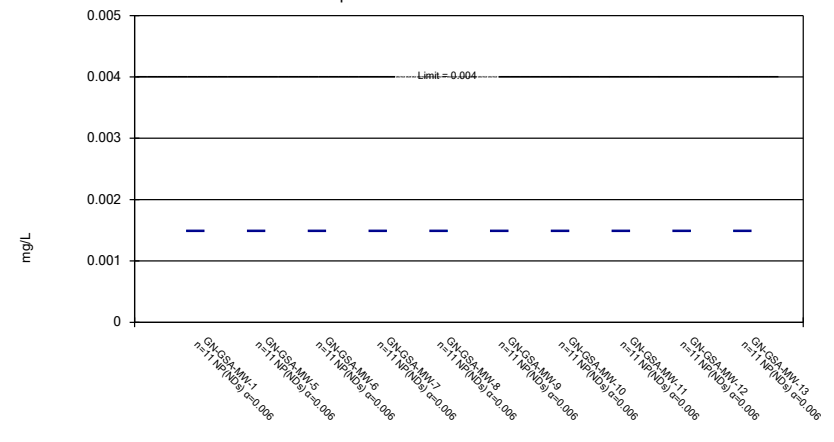
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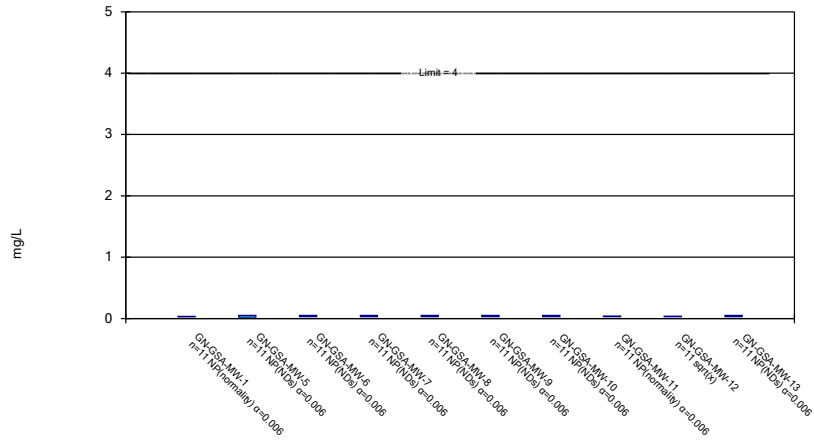
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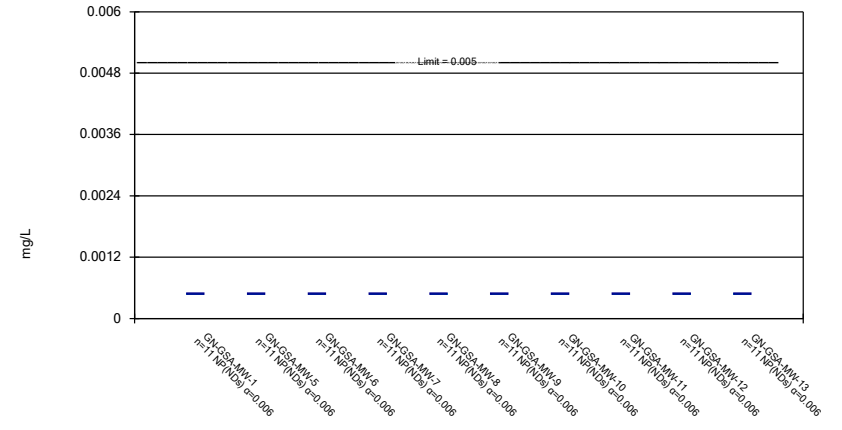
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Non-Parametric Confidence Interval

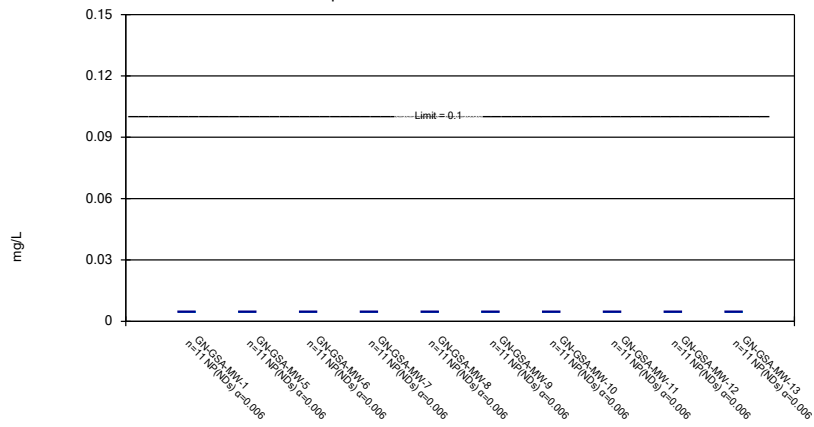
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Non-Parametric Confidence Interval

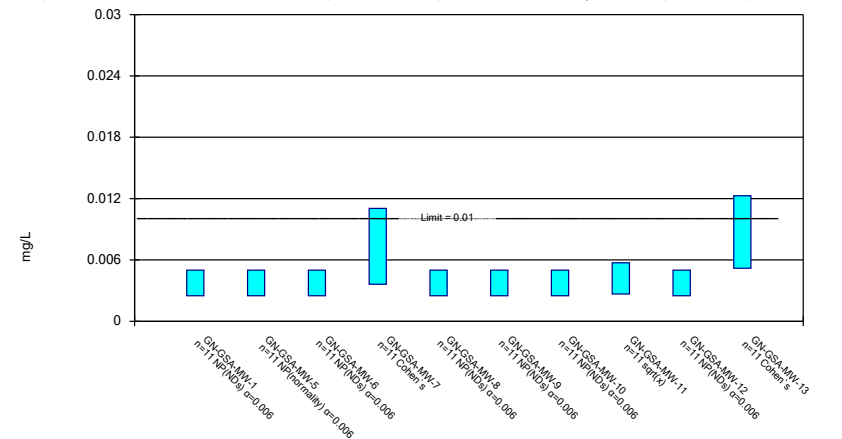
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Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

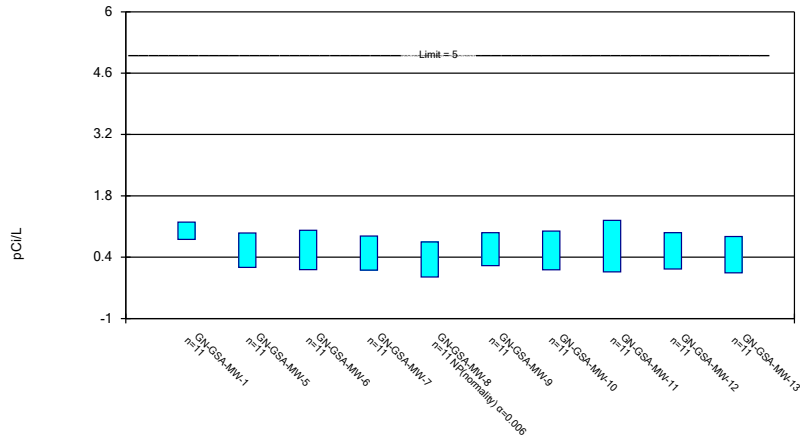
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Parametric and Non-Parametric (NP) Confidence Interval

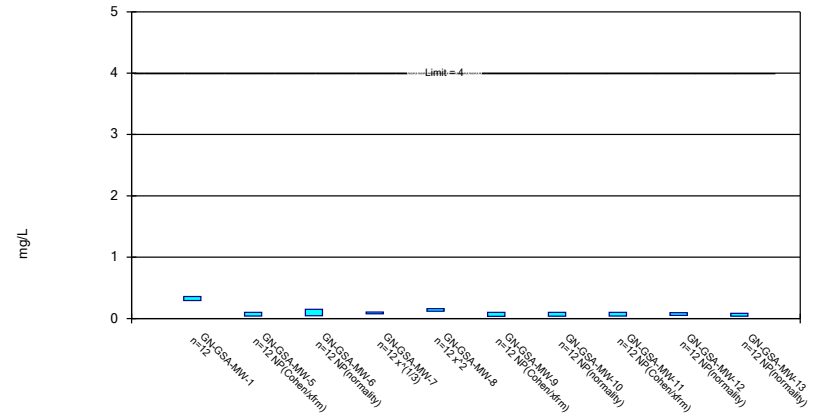
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Parametric and Non-Parametric (NP) Confidence Interval

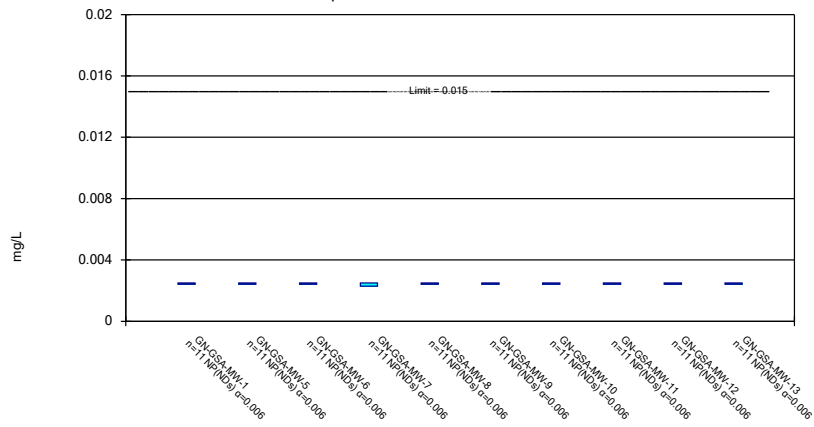
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Non-Parametric Confidence Interval

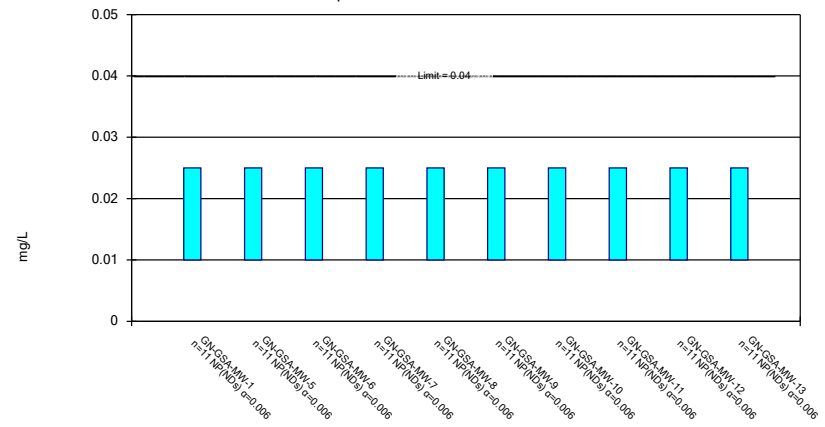
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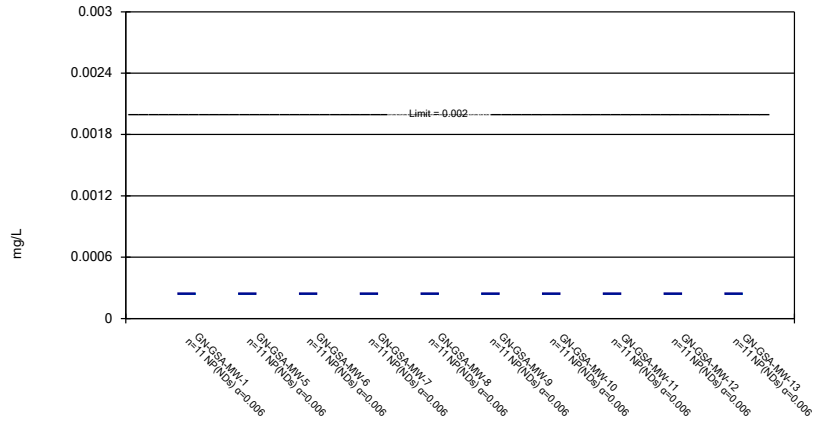
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Non-Parametric Confidence Interval

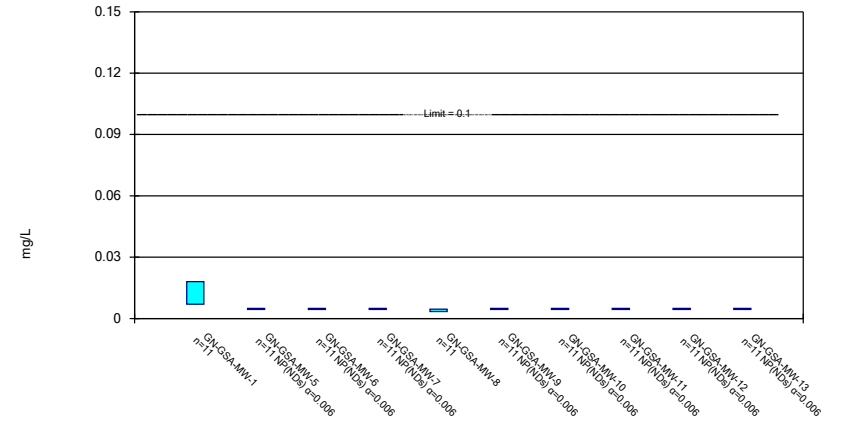
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Parametric and Non-Parametric (NP) Confidence Interval

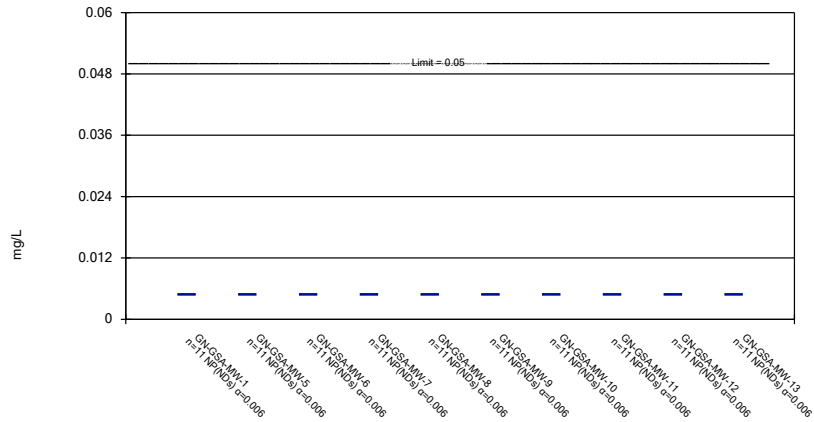
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Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

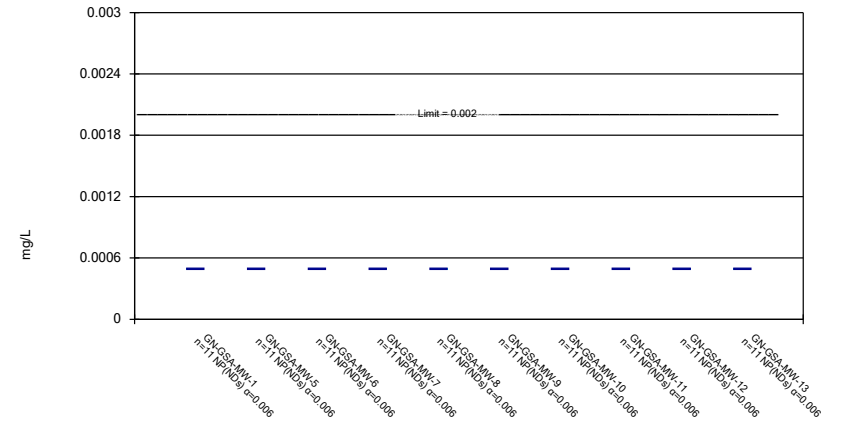
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Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/31/2019 11:36 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Appendix C

Prepared for

Alabama Power Company
600 North 18th Street
Birmingham, AL 35203

ALTERNATE SOURCE DEMONSTRATION
PLANT GASTON GYPSUM POND

Prepared By

Southern Company Services

January 2019

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 a licensed professional engineer with Southern Company Services.

I hereby certify that this *Alternate Source Demonstration* has been prepared to meet the requirements of 40 CFR §257.95(g)(3)(ii) and ADEM Admin Code r. 335-13-15-.06(6)(g)4.(ii).



Gregory B. Dyer, PG
Alabama Professional Geologist No. 1471

1/30/2019

Date



Gregory Whetstone, PE
AL Registered Professional Engineer No. 27885

1/30/19

Date

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Appendix A	Statistical Analysis Plan and Statistical Analyses
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LIST OF ACRONYMS

ASD	Alternate Source Demonstration
CCR	Coal Combustion Residual
cm/sec	centimeter per second
EPA	United States Environmental Protection Agency
HDPE	high-density polyethylene
MCL	maximum contaminant level
mg/L	milligrams per liter
s.u.	standard units
SSI	statistically significant increase
SSL	statistically significant levels
UPL	upper prediction limit

1 INTRODUCTION

1.1 Purpose

This document presents an alternate source demonstration (ASD) for statistically significant concentrations of arsenic over the Maximum Contaminant Level (MCL) 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 r. 335-13-15-.06(6)(g)4.(ii), which allows the owner or operator to demonstrate that a source other than the CCR unit caused the apparent exceedance, 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 Alabama Power Company's Plant Gaston Gypsum Pond (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 first assessment monitoring event (June 2018) identified a statistically significant level (SSL) of arsenic in well GN-GSA-MW-1 above the groundwater protection standard, i.e. the MCL. During the second assessment event (October 2018), arsenic concentrations in well GN-GSA-MW-1 dropped below the promulgated MCL of 0.01 mg/L and no SSL for arsenic was observed.

Southern Company Services has prepared this ASD to address the statistically significant result for arsenic observed in monitoring well GN-GSA-MW-1 during the assessment monitoring event in June 2018. Lines of evidence supporting the conclusion that the SSL identified in the June 2018 are not the result of an impact by the Gypsum Pond include:

- (i) Arsenic concentrations observed in well GN-GSA-MW-1 exhibit a decreasing trend and are currently below the MCL (i.e. there is no longer an actionable arsenic concentration at this well);
- (ii) Other constituents that would be indicative of an FGD gypsum leachate impact (i.e. calcium, sulfate, and total dissolved solids) do not occur at well GN-GSA-MW-1 at elevated concentrations;

Plant Gaston Gypsum Pond – Alternate Source Demonstration

- (iii) Appendix III indicator parameters do not exhibit statistically significant increases (SSIs) above background (an SSI for pH has been identified, but that is likely the result of natural groundwater chemistry variability);
- (iv) There is an insufficient time for a theoretical release from the Gypsum Pond to migrate to monitoring well GN-GSA-MW-1 based on subsurface permeability and groundwater flow velocity;
- (v) The type of waste contained in the Gypsum Pond is not a viable source for arsenic at the site; in a study of 32 gypsum samples conducted by EPRI (2011a), FGD gypsum leachate data were non-detect for arsenic down to 0.005 mg/L as characterized by toxicity characteristic leaching procedure (TCLP) and synthetic precipitation leaching procedure (SPLP), indicating that FGD gypsum like that stored in the Gypsum Pond is not a viable source for arsenic;

To summarize the ASD, the SSL for arsenic in monitoring well GN-GSA-MW-1 is not the result of a release from the Gypsum Pond and is likely caused by natural groundwater chemistry variation.

1.2 Site Setting and Operational History

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 at 31972 Alabama Highway 25, Wilsonville, AL 35186. The Gypsum Pond is located 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 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 geologic properties of the site are characterized by carbonate rocks of the Knox Group of the Cambrian and Ordovician age that locally, have been folded and faulted along with the Ft Payne chert and Parkwood shale. When weathered, the carbonate rocks can yield cherty residual clay or incipient karst type topography.

Plant Gaston Gypsum Pond – Alternate Source Demonstration

The Gypsum Pond facility was originally built in the 1980's for dry ash storage but was never utilized. In the late 2000's, the storage area was converted to an impoundment for gypsum storage. The existing dikes were razed to the former ground surface elevation and rebuilt with structural fill in accordance with the specifications for the new impoundment. Some material was reused as fill, and additional fill was borrowed from adjacent areas on the plant property. The construction of the impoundment was completed in 2010. The Plant Gaston Gypsum Pond was constructed with a liner consisting of a 60-mil HDPE geomembrane overlying 2-ft thick layer of compacted clay having a minimum hydraulic conductivity of 1×10^{-7} cm/sec. The constructed liner meets the requirements for a composite liner as outlined in 40 CFR §257.70(b) and ADEM Administrative Code r. 335-13-15-.04(1)(b).

1.3 Groundwater Monitoring

The groundwater monitoring network is comprised of 15 monitoring wells (4 upgradient and 11 downgradient). **Figure 3, Monitoring Well Locations**, depicts the PE certified monitoring well network. Based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, Alabama Power initiated an assessment monitoring program on in January 15, 2018. Pursuant to 40 CFR §257.95(a) monitoring wells were sampled for all Appendix IV parameters in January as the initial assessment sampling event. Within 90 days of obtaining results, the first semi-annual assessment monitoring event was completed by sampling monitoring wells Appendix III and Appendix IV parameters in May. Semi-annual monitoring was repeated in October pursuant to 40 CFR §257.95(d).

1.4 Basis of the SSL

Parametric tolerance limits were used to calculate background limits from pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The background limits were then used when determining the groundwater protection standard (GWPS). **Appendix A** presents the most recent statistical analyses.

Data collected from downgradient monitoring wells at the Plant Gaston Gypsum Pond were compared to GWPS. The result was an SSL in GN-GSA-MW-1 for arsenic during

Plant Gaston Gypsum Pond – Alternate Source Demonstration

the May 2018 sampling event. No other SSLs over the GWPS were observed during the May 2018 sampling event. During the second assessment monitoring event in October 2018, arsenic concentrations in well GN-GSA-MW-1 declined to below the promulgated MCL as well as the GWPS. No SSLs of Appendix IV constituents over the GWPS were noted during the second assessment monitoring event in October 2018.

2 ALTERNATE SOURCE DEMONSTRATION

Based on the review of site information, the SSL for arsenic in well GN-GSA-MW-1 are not related to a release from the Gypsum Pond, but the result of variations in groundwater chemistry and subsurface heterogeneity not accommodated by the site groundwater statistical analyses. The following presents the lines of evidence supporting this conclusion.

- The arsenic SSL observed during the first assessment monitoring event in well GN-GSA-MW-1 was not repeated during the second semi-annual assessment monitoring event. Arsenic has exhibited a decreasing trend and is currently below the MCL (i.e. there is no longer an actionable arsenic concentration at this well);
- Groundwater quality analyzed from GN-GSA-MW-1 is not consistent with a gypsum leachate source which would be characterized by elevated calcium, sulfate, and dissolved solids. Conversely, SSIs for calcium, dissolved solids, and sulfate have not been observed in GN-GSA-MW-1 and commonly concentrations of these key indicators are often below site background. Sampling reveals pH values typically between 7.6 and 7.8 standard units, which is well below those observed in gypsum leachate (+9.5 SU);
- A CCR impact to groundwater will result in multiple parameters exhibiting significant increase. This has not occurred in well GN-GSA-MW-1. Key monitoring parameters that would indicate impact by the Gypsum pond do not occur at elevated concentrations. Concentrations of arsenic are declining and no longer exhibit SSLs.
- FGD gypsum leachate studies conducted by the Electric Power Research Institute (EPRI, 2011a) and summarized in a report (EPRI, 2012) indicate that arsenic is not a key indicator parameter for FGD gypsum leachates. Thirty-two (32) FGD gypsum leachate tests were conducted with arsenic not-detected or below the method detection limit of 0.005 mg/L in all 32 samples. This suggests that the arsenic detected in GN-GSA-MW-1 is not related to FGD gypsum leachate, but rather a natural source or source other than the Plant Gaston Gypsum Pond.

Plant Gaston Gypsum Pond – Alternate Source Demonstration

- A theoretical release from the Gypsum Pond would require approximately 465 years to migrate to well GN-GSA-MW-1 – the Gypsum Pond has been in operation less than 10 years;
- Monitoring well GN-GSA-MW-1 is unique in terms of monitoring wells at the facility as it was installed deep within a fractured sequence of shale and limestone, whereas other wells were installed in soil overburden or near the overburden – top of rock interface. Thus, statistical evaluations fail to capture the natural variability in geologic materials screened across the site;
- Arsenic concentrations in GN-GSA-MW-1 have steadily declined from 0.044 mg/L in March 2016 to 0.00829 mg/L, below the promulgated MCL, in October 2018. This steady decline in arsenic is more indicative of natural geologic variability than a continuous leachate source and is likely related to arsenic sorbed to iron-stained fractures within the geologic formation;

2.1 Comparison of Gypsum Chemistry with Groundwater Geochemistry

2.1.1 Gypsum Chemistry

FGD gypsum is typically between 95 and 99 percent gypsum (EPRI, 2011a), 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). Metalloids, such as arsenic and boron, are trace components of FGD gypsum. Arsenic and boron average 0.00098 and 0.01037 percent of the total composition of FGD gypsum, respectively (EPRI, 2011a).

Leachate studies of FGD gypsum mirror the results of the total composition analyses described in the preceding paragraph. 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. Conversely, arsenic was not detected in FGD gypsum leachates tested. Boron ranged from not-detected to 20 mg/L with an average of 0.189 mg/L (EPRI, 2011a and EPRI, 2012). Therefore, a signature profile of FGD gypsum leachates would generally be characterized by:

- *Elevated concentration of calcium (hundreds, mg/L)*

Plant Gaston Gypsum Pond – Alternate Source Demonstration

- *Elevated concentration of sulfate (hundreds to low thousands, mg/L)*
- *Non-detected to trace concentrations of arsenic*

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 arsenic in compliance well GN-GSA-MW-1. The data and discussion below provide strong evidence that arsenic detected in GN-GSA-MW-1 is from a source other than the Plant Gaston Gypsum Pond and that no FGD gypsum leachate signature is present in the groundwater analytical results.

2.1.2 FGD Indicator Parameters

During the CCR groundwater monitoring period dating from March 2016 to October 2018, eleven (11) independent groundwater samples have been collected from the PE-certified groundwater monitoring network at the Plant Gaston Gypsum Pond, including monitoring well GN-GSA-MW-1. Key FGD gypsum indicator parameters, calcium and sulfate, were collected and analyzed for during each of these 11 sampling events. Total dissolved solids, another signature of leachate plumes, was also analyzed for during each sampling event.

A review of these FGD gypsum indicator parameters indicates that groundwater quality analyzed in well GN-GSA-MW-1 is not consistent with that of an FGD leachate plume and additionally, consistently lower than upgradient well locations at the site. From March 2016 to October 2018, calcium ranged between 34.3 and 42.2 mg/L, sulfate ranged between 2.95 and 6.06 mg/L, and, total dissolved solids fluctuated very little between 188 and 244 mg/L. The concentrations of calcium and sulfate detected in GN-GSA-MW-1 are roughly 15 and 525 times lower than FGD gypsum leachate concentrations, respectively.

During this same period, calcium and sulfate, in upgradient well GN-GSA-MW-3 ranged between 68.8 mg/L and 109 mg/L while sulfate ranged between 11 and 32.6 mg/L. Total dissolved solids in upgradient well GN-GSA-MW-3 ranged between 215 and 334 mg/L. Similarly, upgradient well location GN-GSA-MW-14S displayed calcium and sulfate concentrations above those observed in well GN-GSA-MW-1. No statistical exceedances

Plant Gaston Gypsum Pond – Alternate Source Demonstration

over background for calcium, sulfate, and total dissolved solids were noted over background in well GN-GSA-MW-1.

This data strongly supports the conclusion that an FGD gypsum leachate signature is not present in groundwater quality data gathered from well GN-GSA-MW-1. **Table 1**, provides a tabular summary of the data discussed in this section. **Figure 4** provides time series to support tabulated data.

2.1.3 Major Cations and Anions – Piper Diagrams

Major cations and anions were collected in all compliance wells to analyze ionic composition of groundwater in the uppermost aquifer beneath the Plant Gaston Gypsum Pond. This data generally show low concentrations of major anions and cations in monitoring well GN-GSA-MW-1. A Piper (trilinear) diagram was constructed from the data to determine hydrogeochemical facies. This data plotted on **Figure 5** shows that groundwater sampled from GN-GSA-MW-1 falls within the calcium-bicarbonate facies similar to upgradient well GN-GSA-MW-3. Calcium-bicarbonate water facies are indicative of relatively shallow, fresh recharging groundwater where groundwater has had little residence time to interact with bedrock or soils. Conversely, and as described in the preceding section, an FGD gypsum leachate source would be typified by high calcium and sulfate (*100s to low 1000s mg/L*) and therefore, would display a calcium-sulfate to sodium-chloride facies. An investigation into the concentrations of key FGD gypsum leachate indicator parameters and piper diagrams constructed for more advanced analyses provide strong evidence that arsenic concentrations observed in GN-GSA-MW-1 are not related to a FGD gypsum leachate source.

2.1.4 Boron

Boron analyzed from well GN-GSA-MW-1 between March 2016 and October 2018 was reviewed to help evaluate a potential source for arsenic detected above the MCL in well GN-GSA-MW-1. This data is presented in **Table 2**.

Boron concentrations in well GN-GSA-MW-1 were detected at trace or “estimated” quantities. These values are called trace or estimated because they were detected, but at low levels, below the laboratory practical quantitation limit (PQL). Between March 2016 and October 2018, boron concentrations were consistently low, ranging from 0.028(J) mg/L to 0.0361(J) mg/L. No noticeable trends were observed in boron results from GN-

Plant Gaston Gypsum Pond – Alternate Source Demonstration

GSA-MW-1 during this time frame, as illustrated in **Figure 6**. Further, statistical analyses of data did not reveal statistically significant concentrations of boron over background in well GN-GSA-MW-1. These low-level detections of boron provide another line of evidence that arsenic observed in well GN-GSA-MW-1 is from a source other than the Plant Gaston Gypsum Pond.

2.1.5 Arsenic

Arsenic concentrations in well GN-GSA-MW-1 have been consistently and steadily decreasing from the first sampling event in March 2016 to the most recent sampling event in October 2018. Concentrations have decreased approximately 0.014 mg/L per month from 0.0444 mg/L (March 2016) to 0.00829 mg/L (October 2018), the most recent result below the promulgated MCL (**Table 3**). This steady decrease in arsenic is not a function of changing pH or ORP over time as presented in **Figures 7 and 8**; however, persistent reducing conditions (negative ORP) likely contribute to the presence of arsenic observed in GN-GSA-MW-1. This decreasing trend in arsenic is strong evidence that (1) an FGD gypsum leachate signature is not present and (2) arsenic observed in well GN-GSA-MW-1 is not associated with an FGD gypsum leachate plume from the Gaston Gypsum Pond.

Arsenic has only been detected at trace or estimated concentrations at other downgradient well locations with no detectable increasing or decreasing trends in wells downgradient of GN-GSA-MW-1. This spatial and temporal distribution of arsenic data is not representative of a persistent or passing/transient arsenic plume as relative concentrations and trends in compliance wells downgradient of GN-GSA-MW-1 should be similar, paralleling those observed in GN-GSA-MW-1. Further, other site monitoring wells, monitoring soil or top of rock interface intervals would be the first to observe an arsenic plume from the Gypsum Pond; however, these wells provide no indications of an arsenic plume. This analysis indicates that arsenic concentrations, previously detected above the MCL in well GN-GSA-MW-1, was not related to an FGD gypsum leachate plume, but more likely naturally present arsenic in subsurface limestone, shale, or fracture fill/mineralized zones connected to the well bore at location GN-GSA-MW-1.

FGD gypsum leachate studies conducted by the Electric Power Research Institute (EPRI, 2011a) and summarized in a report (EPRI, 2012) shows that arsenic is not an indicator parameter for FGD gypsum leachate. Thirty-two (32) FGD gypsum leachate tests were conducted with arsenic not-detected or below the method detection limit of 0.005 mg/L

Plant Gaston Gypsum Pond – Alternate Source Demonstration

in all 32 samples. This suggests that the arsenic detected in GN-GSA-MW-1 is not related to FGD gypsum leachate, but rather a natural source or source other than the Plant Gaston Gypsum Pond.

2.2 Time of Travel and Groundwater Flow Direction

The base of the Gypsum Pond sits at an elevation of approximately 403 feet above mean sea level (ft MSL). The top of screen for well GN-GSA-MW-1 sits at approximately 310 ft MSL. Site specific testing reveals low hydraulic gradients across the site and hydraulic conductivity values around 0.0256 ft/day resulting in a groundwater flow velocity of approximately 0.2 ft per year. Using this data, a leachate plume would require approximately 465 years to reach the same elevation as that of well GN-GSA-MW-1's screen. This time of travel analysis does not factor in any horizontal movement of water.

Additionally, historic and recent potentiometric surface maps provide evidence that monitoring well GN-GSA-MW-1 may be upgradient or in area of “no-flow” coming from the waste boundary. Potentiometric contours indicate gradients and groundwater flow from the northeast or east towards the southwest or west in the vicinity of GN-GSA-MW-1 in a historic potentiometric surface map (**Figure 9**). Other potentiometric surfaces suggest that the area around GN-GSA-MW-1 is stagnant or has very low gradient for flow towards GN-GSA-MW-1 from the Gypsum Pond (**Figure 10**). At a minimum, this data suggests that time of travel required to reach the well screen would be greater than the 465 years described above.

Given that the Plant Gaston Gypsum Pond was constructed in the late 2000s, this calculation provides another strong line of evidence that the arsenic observed in well GN-GSA-MW-1 is coming from a source other than the Gypsum Pond.

2.3 Geology and Well Screen Placement

Plant Gaston is located in the Coosa Valley district of the Valley and Ridge Physiographic Province of central Alabama. The geologic units on the property have been folded and faulted at various intervals, and several faults consisting of low-to-high angle thrust faults and some normal faults are present. Fault sets trend obliquely to one another in the northeastern portion of the plant, resulting in a series of imbricate thrust slices of Fort Payne chert, Parkwood and Floyd shales, and Newala limestone (Frings, 1980) (**Figure 11**).

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Generalized near surface stratigraphy of the site, in descending order, consists of approximately 18 to 60 feet of overburden materials overlying the Ordovician Newala Limestone. Overburden materials are predominantly comprised of yellow-brown, clayey sand with zones of clay and gravelly fines. The underlying Newala Limestone was encountered at depths ranging from 18 to 60 feet and was described as a medium to dark gray, micritic limestone with thin shale layers and minor amounts of dolomite. A 12-ft thick section of light gray, sandstone was encountered at location GN-GSA-MW-13, possibly indicating the presence of the Parkwood Formation at portions of the site. Pyrite occurrence was noted at GN-GSA-MW-13 as well. Bedrock geology surrounding the site consists of folded Parkwood Shale, Ft Payne Chert, and Newala Limestone. These units are steeply dipping at the site (30° to 50°) and are cross-cut by multiple faults.

Monitoring well GN-GSA-MW-1 was screened much deeper with respect to the remaining monitoring wells at the site due to lack of saturation in overburden and near the overburden-rock interface towards the northeast corner of the site. GN-GSA-MW-1 was screened at depths between 113 and 123 feet below ground surface (BGS) and 83 to 93 feet below the overburden-top of rock interface. The boring log denotes multiple shale intervals, fractures, fracture mineralization, and slickenside signatures typical of fault zones. The remaining monitoring well network was screened across overburden materials, overburden-top of rock interface, and shallow rock and generally, between 30 and 60 feet BGS. The arsenic occurring in GN-GSA-MW-1 is likely attributable to the well screen being placed deeper within rock, where shale intervals, structural discontinuities, fracture mineralization (iron, manganese-oxides), and lower ORP values contribute to arsenic concentrations. The strongly decreasing trend suggests that arsenic occurs naturally in groundwater at the site.

2.4 Compliant Liner System and Separation from Uppermost Aquifer

The Plant Gaston Gypsum Pond is constructed with a liner system that meets the composite liner requirements of 40 CFR § 257.70(b) and ADEM Administrative Code r. 335-13-15-.04(1)(b). This low permeability liner system restricts the vertical migration of ponded water from entering the uppermost aquifer system. Further, the Plant Gaston Gypsum Pond has no sustained hydraulic connection with the uppermost aquifer and is separated by at least 1.52 meters (5 feet) above the upper limit of the uppermost aquifer. No operational, maintenance, or other deficiencies have been noted for the facility that would have led to an unpermitted discharge to groundwater.

3 CONCLUSIONS

Southern Company Services has prepared this ASD to address the statistically significant result for arsenic observed in monitoring well GN-GSA-MW-1 during the assessment monitoring event in June 2018. Based on the review of site information, the SSL for arsenic in well GN-GSA-MW-1 are not related to a release 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:

- (i) The absence of an FGD gypsum leachate signature in groundwater quality (i.e., high calcium, sulfate, total dissolved solids) samples obtained from GN-GSA-MW-1 combined with detected concentrations of these key indicators commonly below site background levels;
- (ii) Insufficient time of travel for arsenic to migrate to monitoring well GN-GSA-MW-1;
- (iii) FGD gypsum leachate data are non-detect for arsenic down to 0.005 mg/L as characterized by toxicity characteristic leaching procedure (TCLP) and synthetic precipitation leaching procedure (SPLP) in a study of 32 gypsum samples conducted by EPRI (2011a), indicating that FGD gypsum is not a sufficient explanation for arsenic concentration in well GN-GSA-MW-1;
- (iv) A temporal and spatial distribution of arsenic and key FGD gypsum indicator parameters not indicative of plume behavior, but of natural sources and variability;
- (v) Only low-levels of boron (trace or estimated detections) are detected in GN-GSA-MW-1;
- (vi) Arsenic concentrations detected in GN-GSA-MW-1 have declined steadily to below the promulgated MCL during the most recent event; and
- (vii) The Gaston Gypsum Pond is a compliant lined facility also maintaining the required 5 ft of separation from the uppermost aquifer.

Plant Gaston Gypsum Pond – Alternate Source Demonstration

This document presents an ASD for statistically significant concentrations of arsenic over the MCL 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 r. 335-13-15-.06(6)(g)4.(ii) and demonstrates that the Gypsum Pond is not the cause of the reported arsenic SSL. Based on the findings presented here, the site should not implement an assessment of corrective measures pursuant to 40 CFR §257.96 and r. 335-13-15-.06(7).

Plant Gaston Gypsum Pond – Alternate Source Demonstration

4 REFERENCES

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EPA (2015). Hazardous and Solid Waste Management Systems; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule, 40 CFR Parts 257 and 261, Federal Register, Vol. 80, No. 74, April 17, 2015, pp.21302-21501

EPRI (2011). Composition and Leaching of FGD Gypsum and Mined Gypsum, Technical Report, November 2011

EPRI (2012). Groundwater Quality Signatures for Assessing Potential Impacts from Coal Combustion Product Leachate, October 2012

TABLES

Table 1. GN-GSA-MW-1 FGD Gypsum Indicator Parameters Comparison				
Sample	Date	Calcium (mg/L)	Dissolved Solids (mg/L)	Sulfate (mg/L)
¹ FGD Gypsum Leachate	2011	643-777	NA	430-1550
² Site Background Concentrations	2016-2018	5.94-109	27.3-349	3-32.6
GN-GSA-MW-1	03-24-2016	36.9	203	6.06
GN-GSA-MW-1	05-10-2016	37.9	204	5.47
GN-GSA-MW-1	07-05-2016	35.3	188	4.8
GN-GSA-MW-1	09-06-2016	34.8	188	3.91
GN-GSA-MW-1	11-08-2016	34.3	197	2.95
GN-GSA-MW-1	02-22-2017	35.9	165	3.3(J)
GN-GSA-MW-1	05-31-2017	34.3	244	3.4(J)
GN-GSA-MW-1	07-05-2017	35.5	201	3.4(J)
GN-GSA-MW-1	09-07-2017	36.7	196	3.6(J)
GN-GSA-MW-1	06-12-2018	42.2	221	4.2(J)
GN-GSA-MW-1	10-23-2018	38.9	195	3(J)

*Table 1 demonstrates that concentrations of key FGD gypsum indicator parameters observed in well GN-GSA-MW-1 are 15 to 23 times lower for calcium and 71 to 525 times lower for sulfate than the results of 32 FGD gypsum leachate samples analyzed by EPRI (2011). This table also demonstrates that these same indicator parameters are within range or lower than site background concentrations. This data indicates the absence of an FGD gypsum leachate signature within groundwater quality collected from GN-GSA-MW-1. Notes: *Sourced from EPRI (2011), **Range of background wells GN-GSA-MW-2, GN-GSA-MW-3, GN-GSA-MW-14S, GN-GSA-MW-15.*

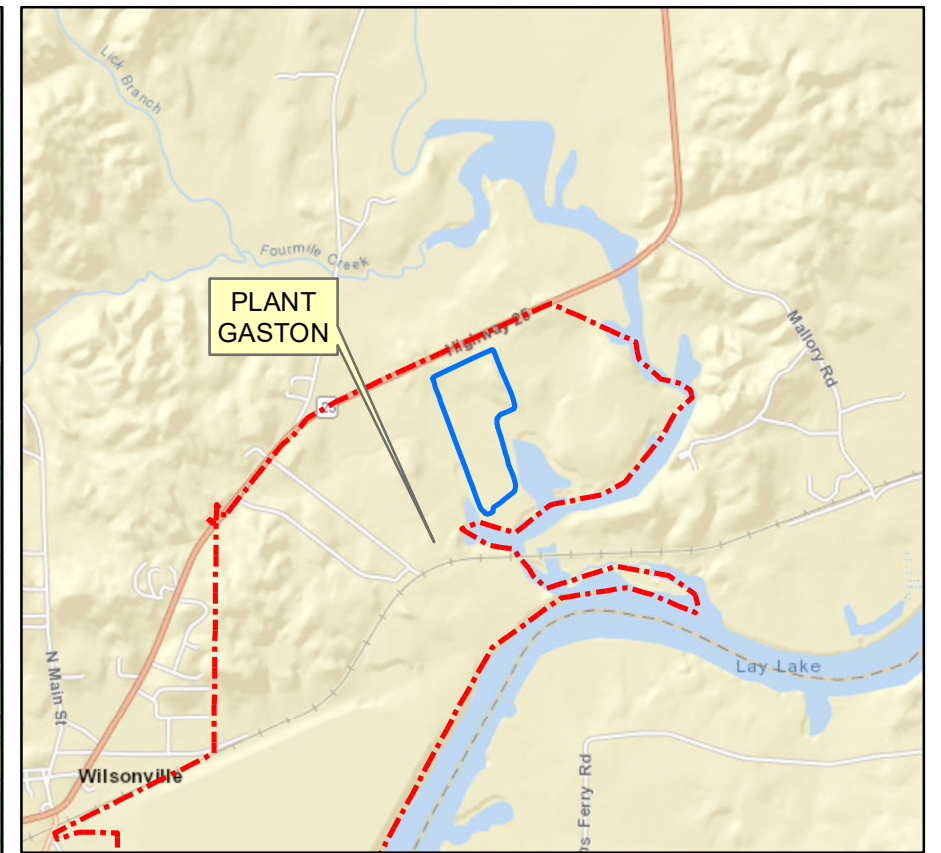
Table 2. Boron Concentrations in Well GN-GSA-MW-1		
Well	Date	Boron (mg/L)
GN-GSA-MW-1	03-24-2016	0.0311(J)
GN-GSA-MW-1	05-10-2016	0.0334(J)
GN-GSA-MW-1	07-05-2016	0.0359(J)
GN-GSA-MW-1	09-06-2016	0.0316(J)
GN-GSA-MW-1	11-08-2016	0.0361(J)
GN-GSA-MW-1	02-22-2017	0.028(J)
GN-GSA-MW-1	05-31-2017	0.0297(J)
GN-GSA-MW-1	07-05-2017	0.0302(J)
GN-GSA-MW-1	09-07-2017	0.0345(J)
GN-GSA-MW-1	06-12-2018	0.0331(J)
GN-GSA-MW-1	10-23-2018	0.0345(J)

Table 2. Boron concentrations in well GN-GSA-MW-1 show no trend and remain consistently detected at trace concentrations (J) or below laboratory PQLs.

Table 3. Arsenic Concentrations in Well GN-GSA-MW-1		
Well	Date	Arsenic (mg/L)
GN-GSA-MW-1	03-24-2016	0.0444
GN-GSA-MW-1	05-10-2016	0.041
GN-GSA-MW-1	07-05-2016	0.0333
GN-GSA-MW-1	09-06-2016	0.0289
GN-GSA-MW-1	11-08-2016	0.0241
GN-GSA-MW-1	02-22-2017	0.0192
GN-GSA-MW-1	05-31-2017	0.0154
GN-GSA-MW-1	07-05-2017	0.0155
GN-GSA-MW-1	02-05-2018	0.014
GN-GSA-MW-1	06-12-2018	0.011
GN-GSA-MW-1	10-23-2018	0.00829

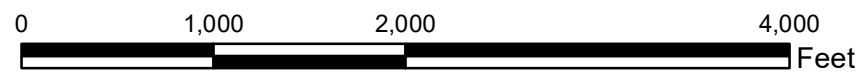
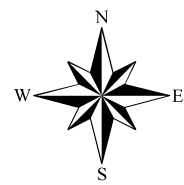
Table 3. Arsenic concentrations show a consistent, steady decrease in well GN-GSA-MW-1. The most recent result below the promulgated MCL.

Figures



Legend

- Gypsum Pond
- Property Boundary (Approximate)



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FIGURE 1
SITE LOCATION MAP
PLANT GASTON GYPSUM POND




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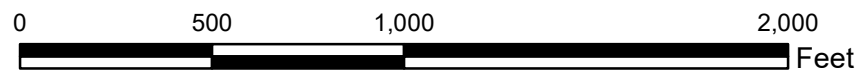
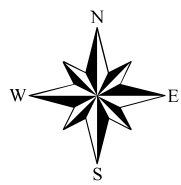
FOR

Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:12k		FIGURE 1	1		



Legend

-  Monitoring Well Network
-  Gypsum Pond
-  10-foot Topographic Contour



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FIGURE 2
SITE PLAN MAP
PLANT GASTON GYPSUM POND

Southern Company Generation
Earth Science and Environmental Engineering

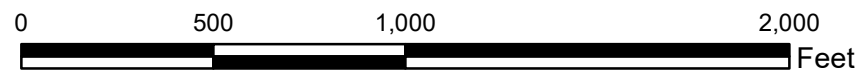
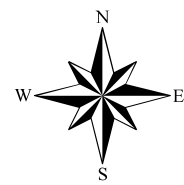
FOR

Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:6k		FIGURE 2	1		



Legend

- Monitoring Well Network
- Gypsum Pond Boundary
- Property Boundary (Approximate)



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FIGURE 3
MONITORING WELL LOCATION MAP
PLANT GASTON GYPSUM POND

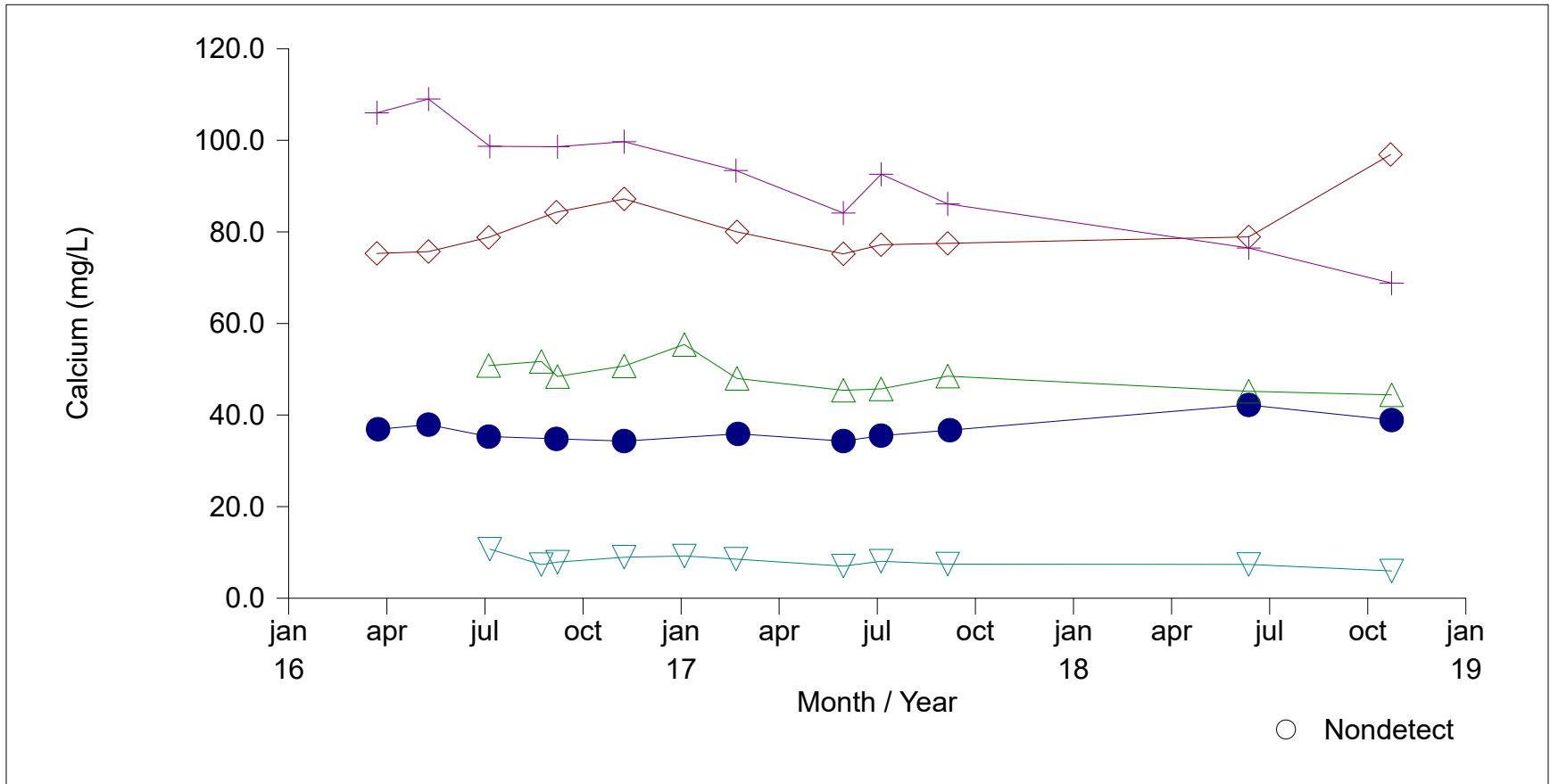
Southern Company Generation
Earth Science and Environmental Engineering

FOR

Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:6k		FIGURE 3	1		

Gaston GP

Time Series Plot for Calcium



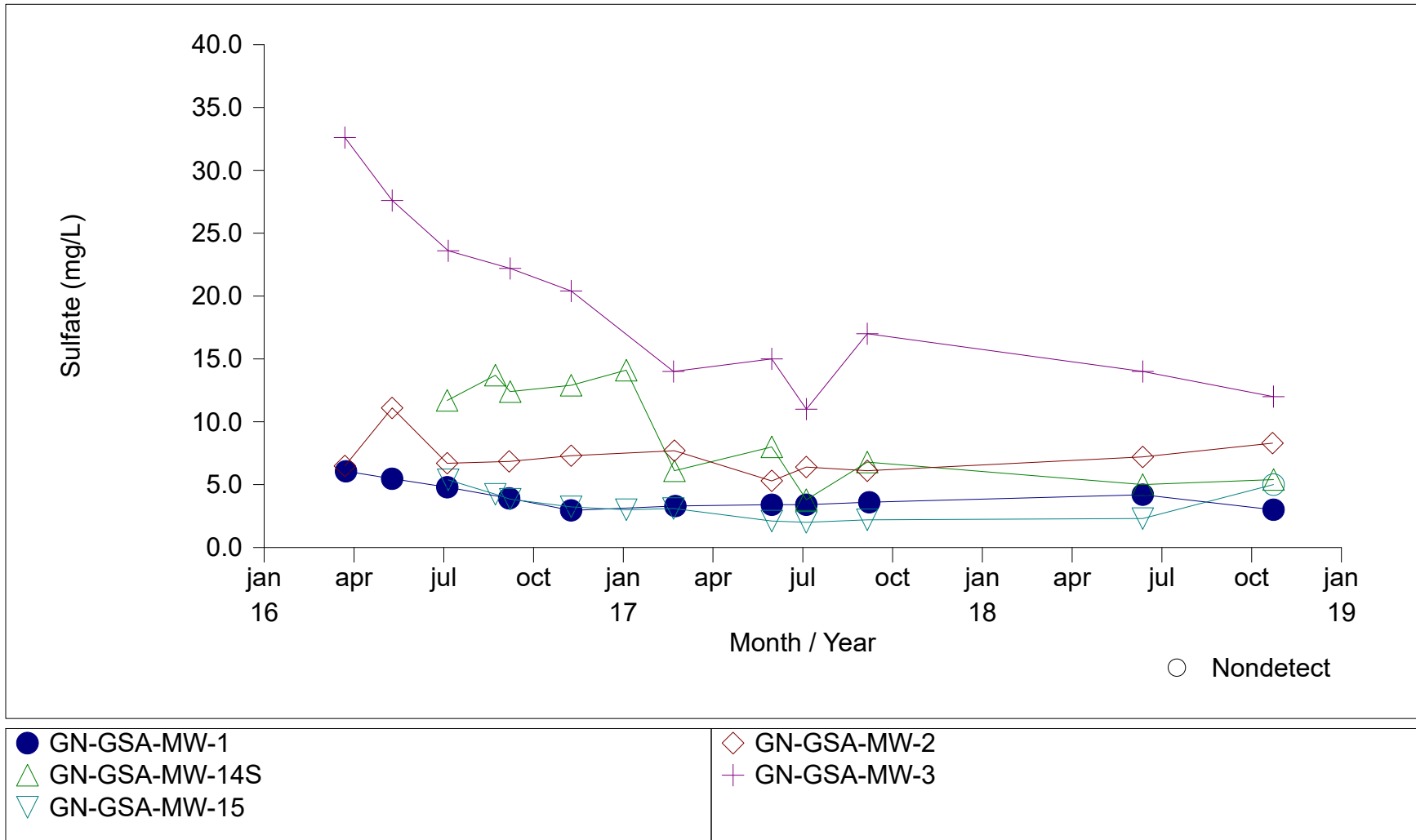
○ Nondetect

● GN-GSA-MW-1
△ GN-GSA-MW-14S
▽ GN-GSA-MW-15

◇ GN-GSA-MW-2
+ GN-GSA-MW-3

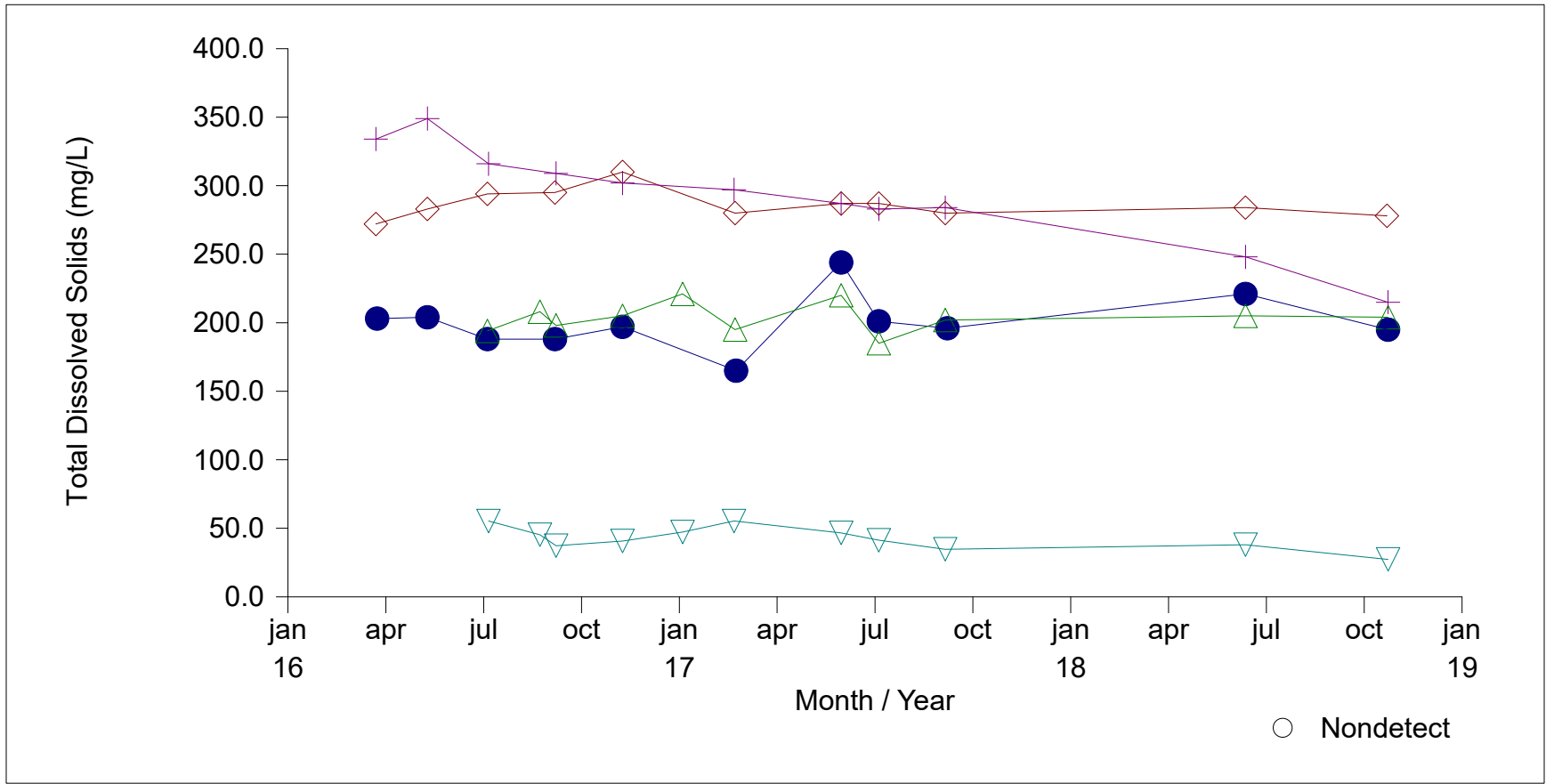
Gaston GP

Time Series Plot for Sulfate



Gaston GP

Time Series Plot for Total Dissolved Solids

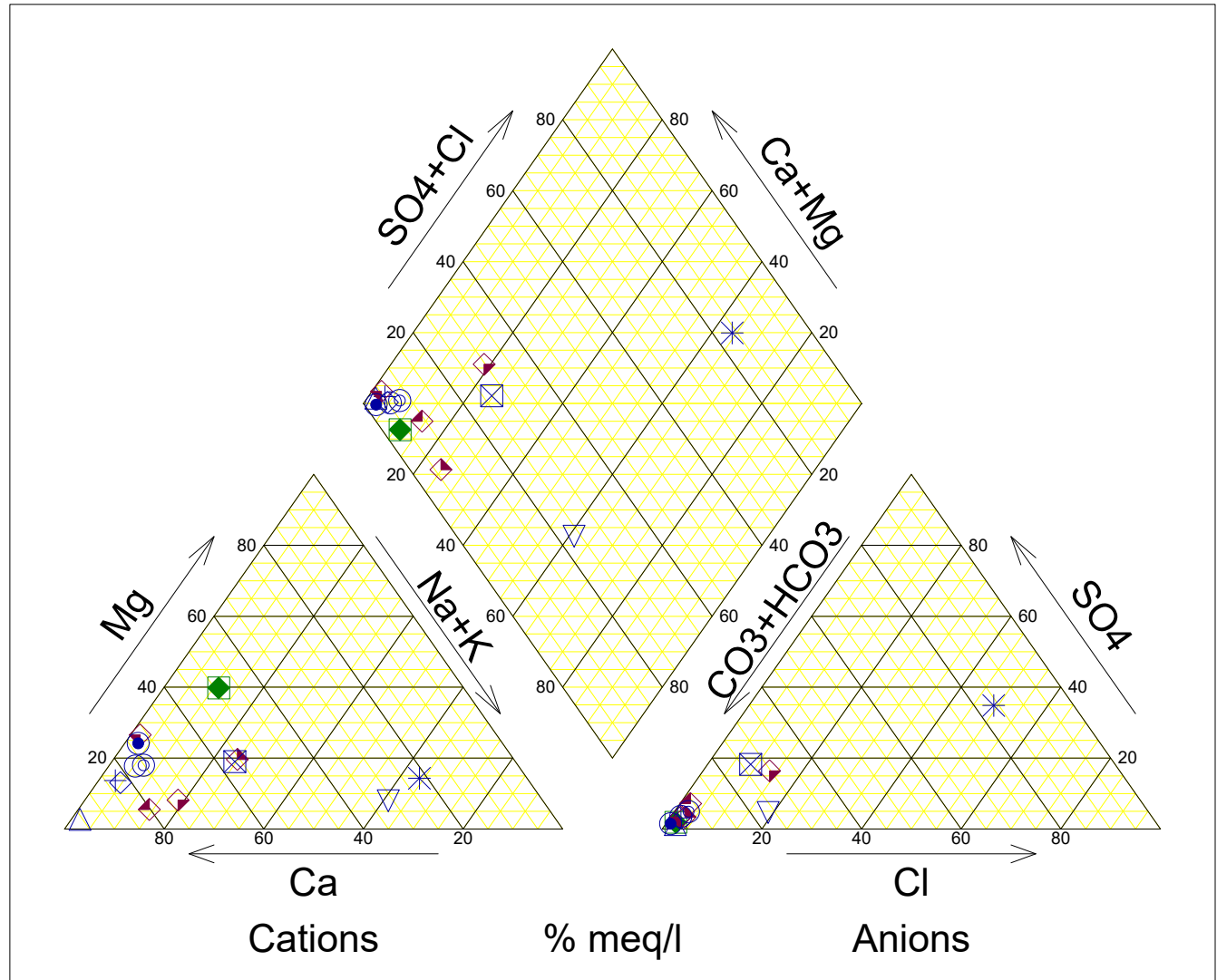


○ Nondetect

- GN-GSA-MW-1
- △ GN-GSA-MW-14S
- ▽ GN-GSA-MW-15
- ◇ GN-GSA-MW-2
- + GN-GSA-MW-3

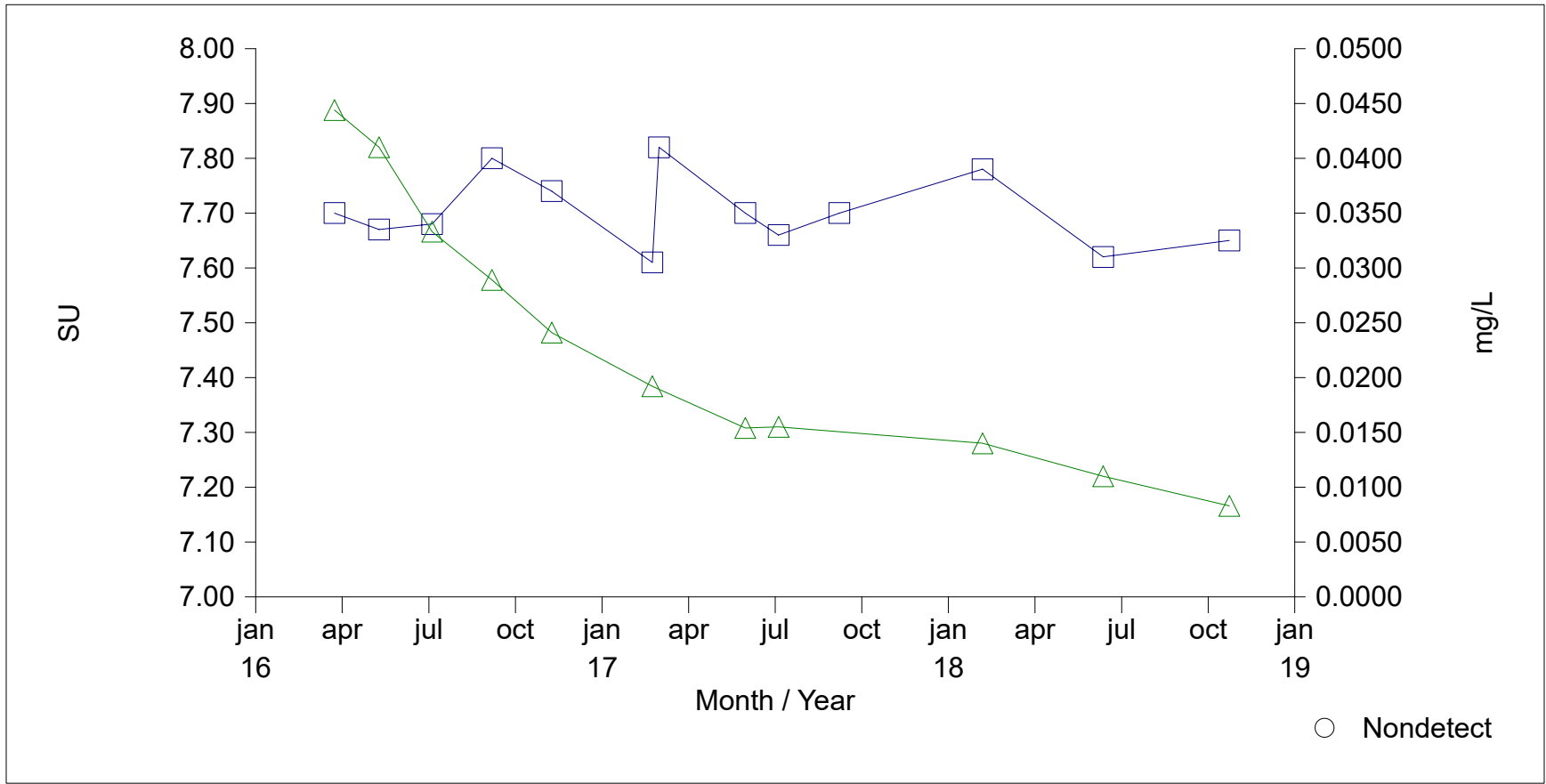
Gaston GP

■	GN-GSA-MW-1	10/22/2018 - 10/24/2018 (8.54%, 267.92ppm)
▲	GN-GSA-MW-10	10/22/2018 - 10/24/2018 (13.6%, 356.921ppm)
▼	GN-GSA-MW-11	10/22/2018 - 10/24/2018 (7.34%, 86.068ppm)
◇	GN-GSA-MW-12	10/22/2018 - 10/24/2018 (10%, 266.22ppm)
+	GN-GSA-MW-13	10/22/2018 - 10/24/2018 (13%, 383ppm)
◆	GN-GSA-MW-14S	10/22/2018 - 10/24/2018 (8.69%, 276.867ppm)
◇	GN-GSA-MW-15	10/22/2018 - 10/24/2018 (12.2%, 25.819ppm)
◇	GN-GSA-MW-2	10/22/2018 - 10/24/2018 (13.6%, 430.328ppm)
◆	GN-GSA-MW-3	10/22/2018 - 10/24/2018 (10.2%, 297.83ppm)
⊠	GN-GSA-MW-5	10/22/2018 - 10/24/2018 (8%, 361.734ppm)
*	GN-GSA-MW-6	10/22/2018 - 10/24/2018 (9.98%, 10.445ppm)
⊙	GN-GSA-MW-7	10/22/2018 - 10/24/2018 (11.1%, 310.8ppm)
⊙	GN-GSA-MW-8	10/22/2018 - 10/24/2018 (10.2%, 255.38ppm)
○	GN-GSA-MW-9	10/22/2018 - 10/24/2018 (6.93%, 241.605ppm)



Gaston GP

Time Series Plot for GN-GSA-MW-1



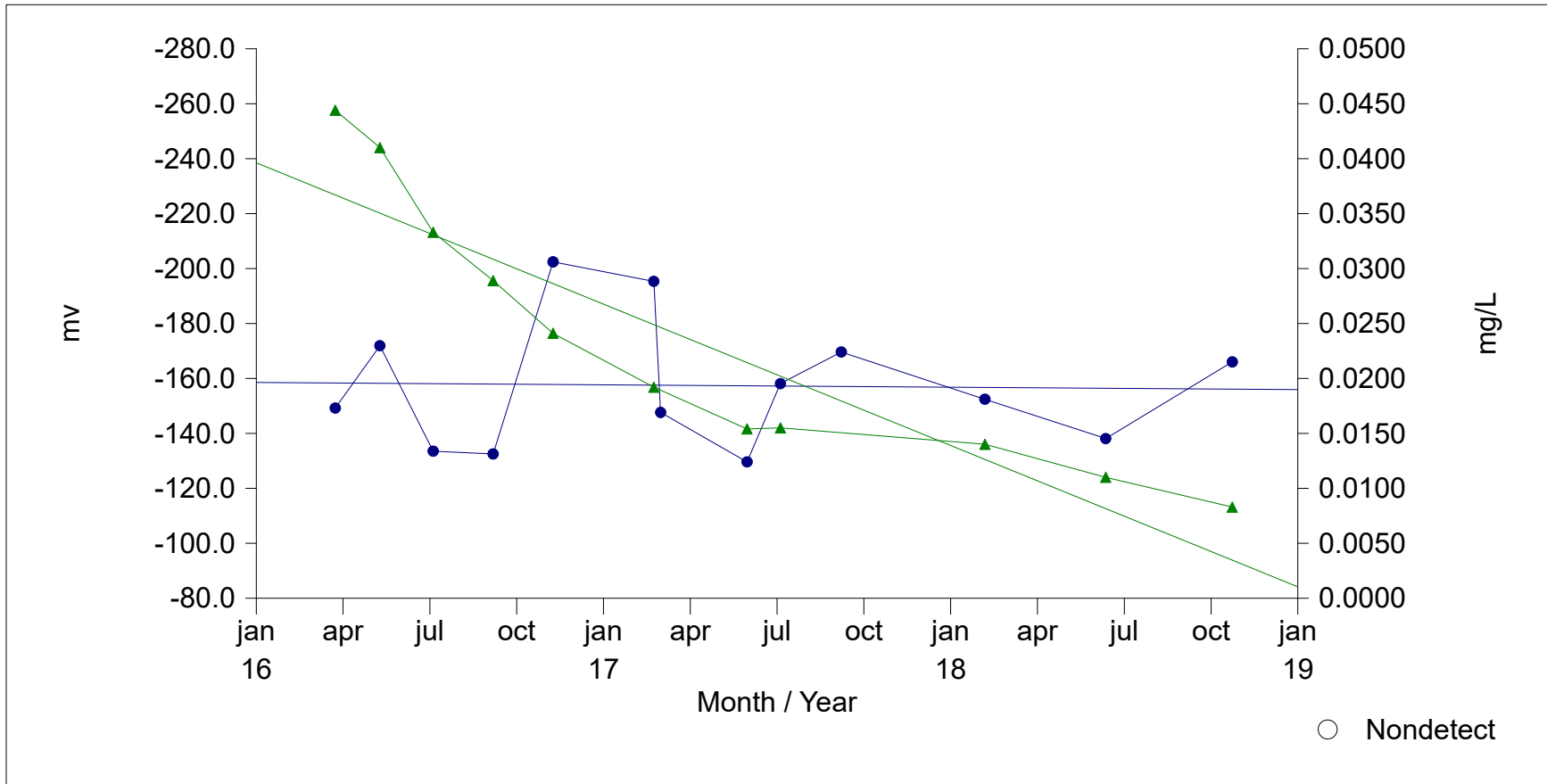
□ pH

△ Arsenic

○ Nondetect

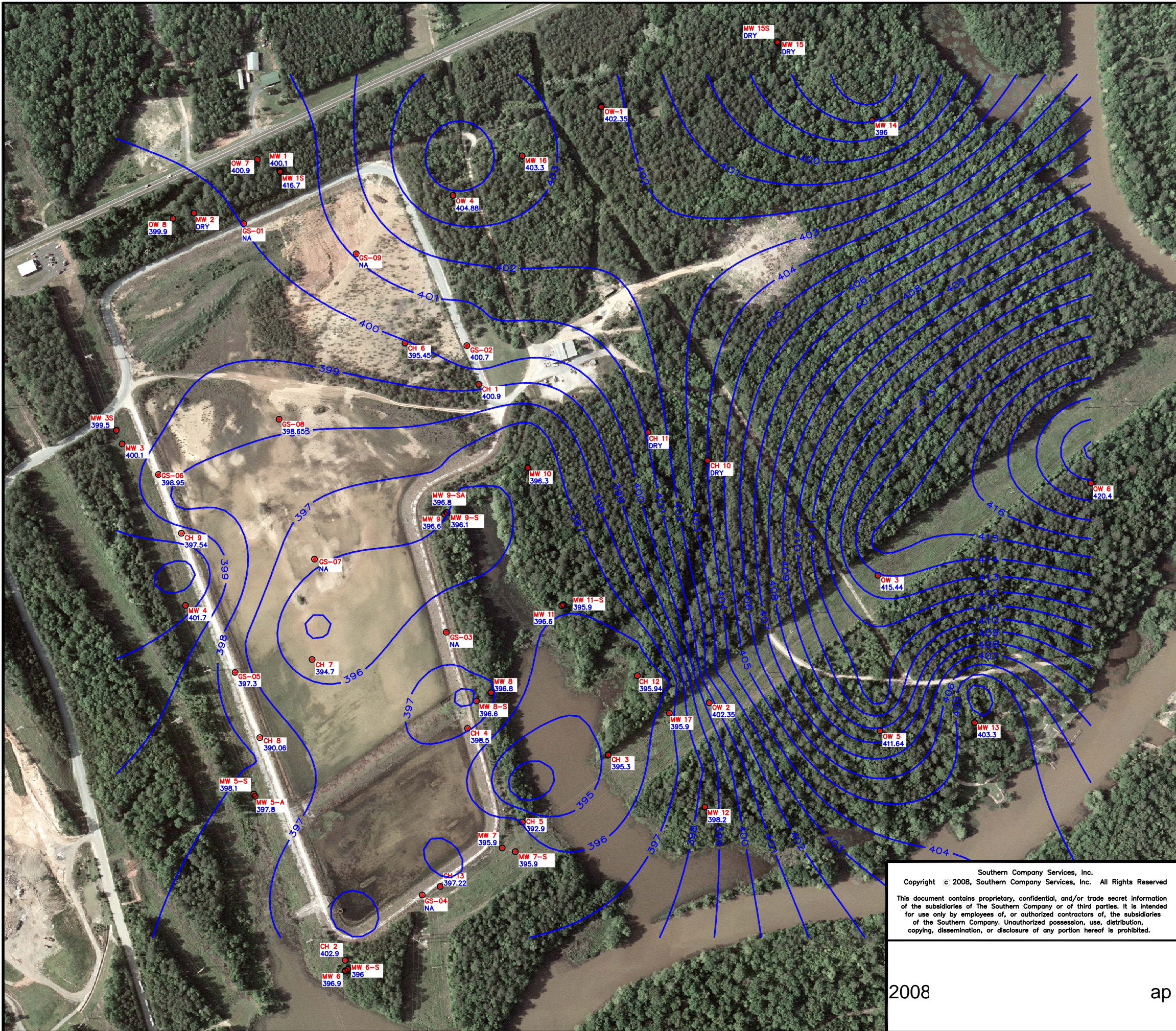
Gaston GP

Time Series Plot for GN-GSA-MW-1



● Oxidation Reduction Potential

▲ Arsenic



LEGEND:

- GS-01 2008 GEOTECHNICAL BORINGS
- CH-1 1980 GEOTECHNICAL BORINGS
- OW-1 1980 OBSERVATION WELLS
- MW-1 1983 MONITOR WELLS

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**Southern Company Generation
 Engineering and Construction Services**

FOR

Alabama Power Company

2008

ap

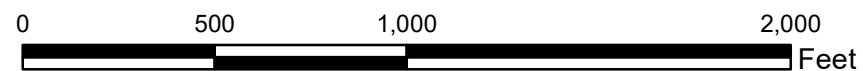
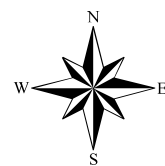
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1"=30'			1	FINAL	0



Legend

- Monitoring Well

GN-AP-MW-1	Well ID
398.46	Groundwater Elevation
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Gypsum Pond



NOTE: NAVD88 indicates North American Vertical Datum of 1988.

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Figure 10

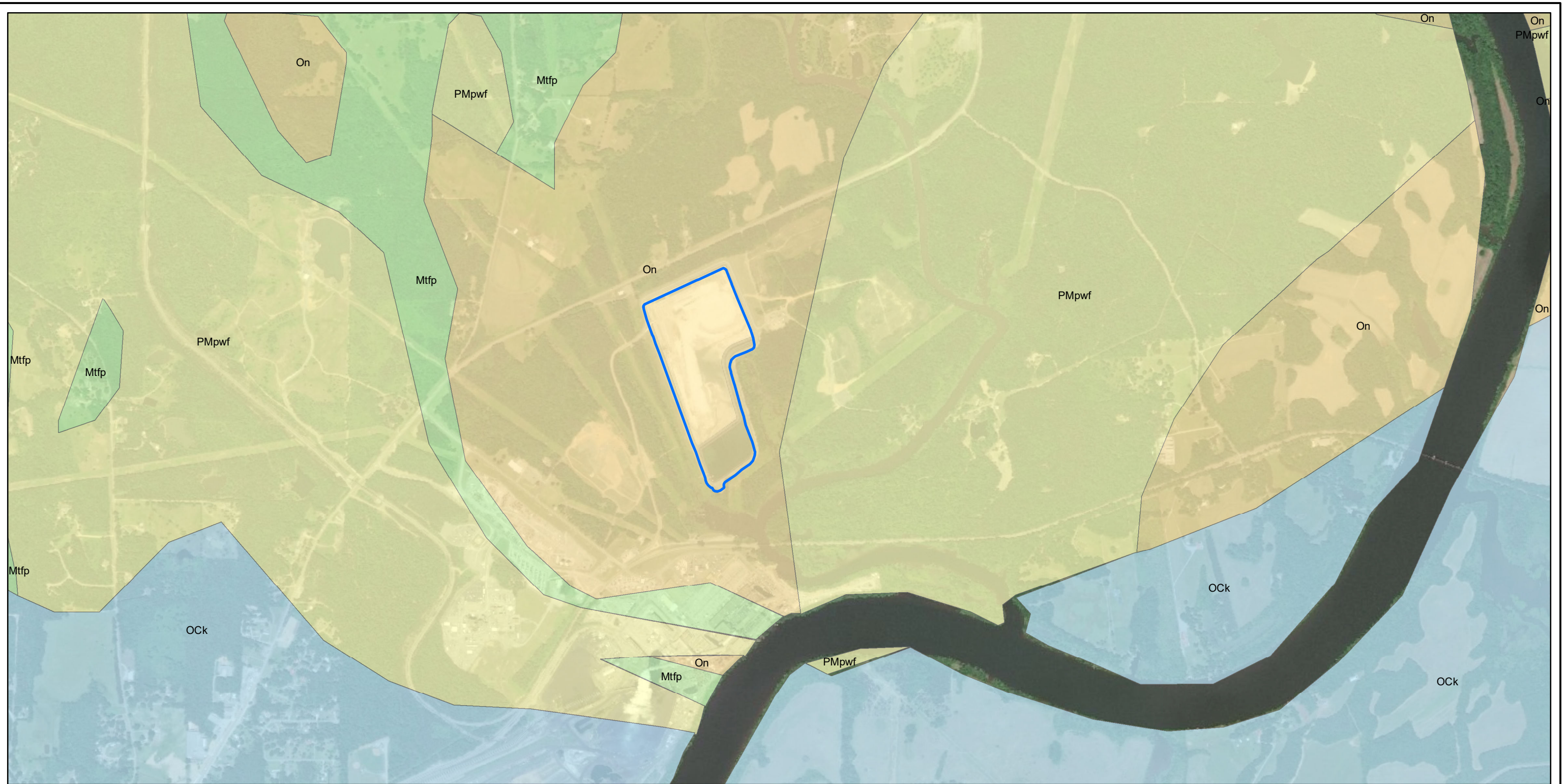
POTENTIOMETRIC SURFACE MAP
 JUNE 12, 2018
 PLANT GASTON GYPSUM POND

**Southern Company Generation
 Earth Science and Environmental Engineering**

FOR

Alabama Power Company

SCALE	PROJ. I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:6k			1		

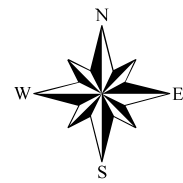


Legend

Gypsum_Pond

Geologic Units

- Knox Group undifferentiated (Ock)
- Newala Limestone (On)
- Parkwood Formation and Floyd Shale undifferentiated (PMpwf)
- Tuscumbia Limestone and Fort Payne Chert undifferentiated (Mtfp)



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**Southern Company Generation
Earth Science and Environmental Engineering**

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**SITE GEOLOGIC MAP
PLANT GASTON GYPSUM POND**

SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:15k			1		

Appendix A

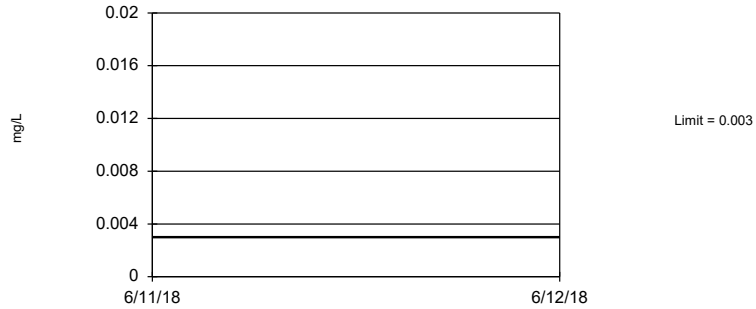
1st Semi-Annual

Upper Tolerance Limits - App IV

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/14/2019, 9:26 AM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	40	n/a	n/a	95	n/a	n/a	0.1285	NP Inter(NDs)
Arsenic (mg/L)	0.005	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Barium (mg/L)	0.06031	40	0.02996	0.01428	0	None	No	0.05	Inter
Beryllium (mg/L)	0.003	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Boron (mg/L)	0.1	40	n/a	n/a	97.5	n/a	n/a	0.1285	NP Inter(NDs)
Cadmium (mg/L)	0.001	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Chromium (mg/L)	0.01	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Cobalt (mg/L)	0.01	40	n/a	n/a	95	n/a	n/a	0.1285	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.6	40	n/a	n/a	5	n/a	n/a	0.1285	NP Inter(normal...)
Fluoride (mg/L)	0.3	44	n/a	n/a	29.55	n/a	n/a	0.1047	NP Inter(normal...)
Lead (mg/L)	0.005	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Lithium (mg/L)	0.05	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Mercury (mg/L)	0.0005	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Molybdenum (mg/L)	0.01	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Selenium (mg/L)	0.01	40	n/a	n/a	100	n/a	n/a	0.1285	NP Inter(NDs)
Thallium (mg/L)	0.001	40	n/a	n/a	97.5	n/a	n/a	0.1285	NP Inter(NDs)

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 40 background values. 95% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Antimony Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

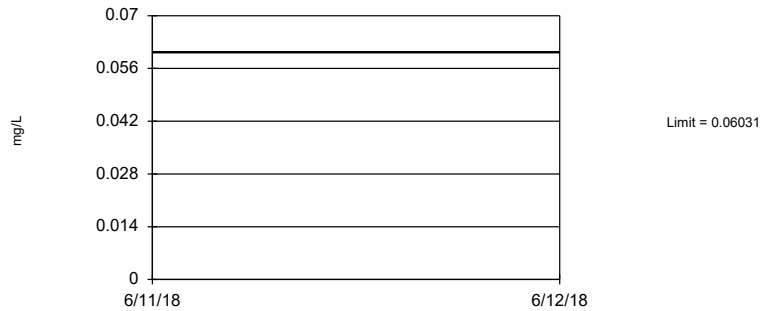
Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Arsenic Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

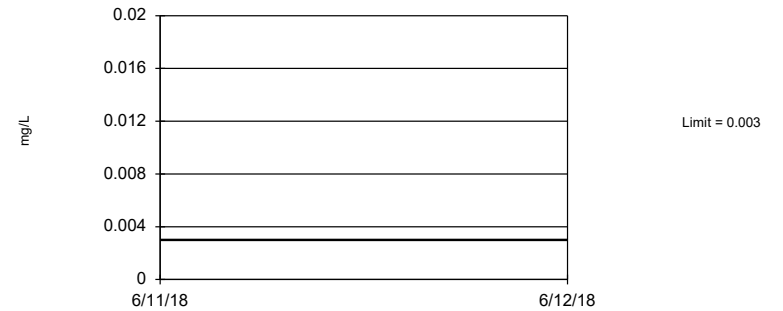
Tolerance Limit
Interwell Parametric



95% coverage. Background Data Summary: Mean=0.02996, Std. Dev.=0.01428, n=40. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9196, critical = 0.919. Report alpha = 0.05.

Constituent: Barium Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

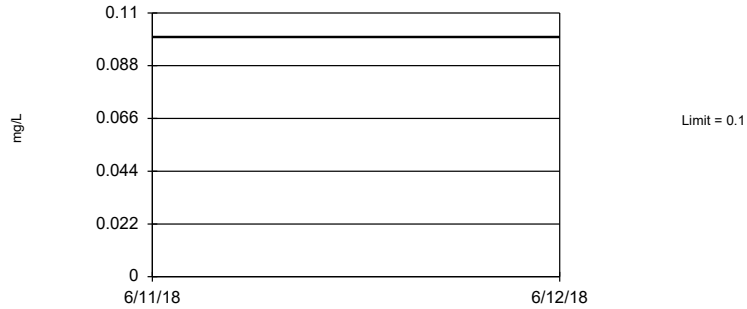
Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Beryllium Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 40 background values. 97.5% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Boron Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Cadmium Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Chromium Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 40 background values. 95% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Cobalt Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

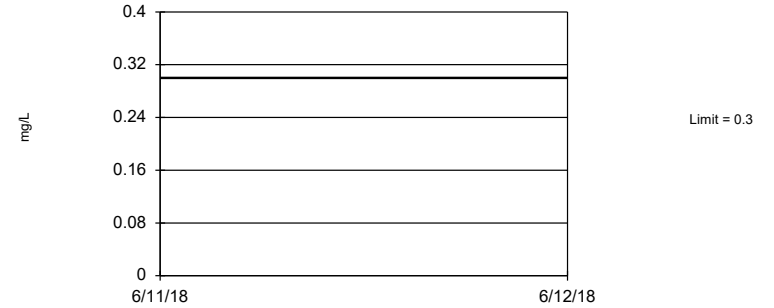
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 40 background values. 5% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Combined Radium 226 + 228 Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 29.55% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Fluoride Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

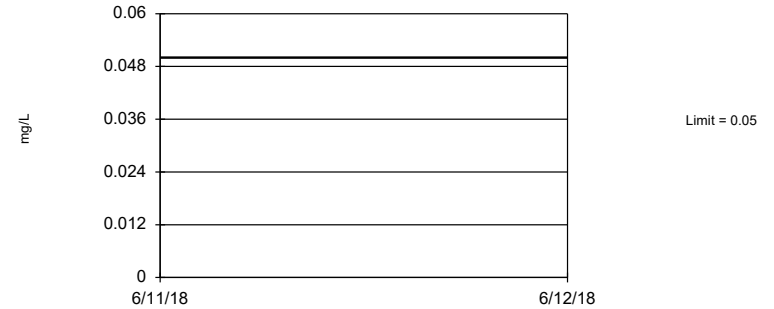
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Lead Analysis Run 1/14/2019 9:24 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

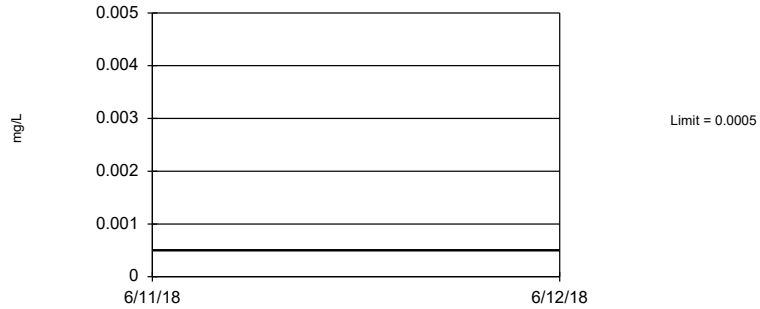
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Lithium Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Mercury Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Molybdenum Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Selenium Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 40 background values. 97.5% NDs. 89.26% coverage at alpha=0.01; 92.77% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1285.

Constituent: Thallium Analysis Run 1/14/2019 9:25 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Confidence Intervals - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:33 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GN-GSA-MW-1	0.02573	0.01087	0.01	Yes	7	0	No	0.01	Param.

Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:33 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.0015	0.000629	0.006	No	10	60	No	0.011	NP (normality)
Antimony (mg/L)	GN-GSA-MW-5	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-11	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.0015	0.0015	0.006	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.02573	0.01087	0.01	Yes	7	0	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-5	0.0025	0.00119	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-6	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-8	0.00162	0.00112	0.01	No	10	10	No	0.011	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-9	0.0025	0.00101	0.01	No	10	80	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-10	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.0025	0.0025	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-12	0.0025	0.00102	0.01	No	10	20	No	0.011	NP (Cohens/xfrm)
Arsenic (mg/L)	GN-GSA-MW-13	0.0025	0.0011	0.01	No	10	50	No	0.011	NP (normality)
Barium (mg/L)	GN-GSA-MW-1	1.924	1.512	2	No	10	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GN-GSA-MW-5	0.04553	0.03411	2	No	10	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GN-GSA-MW-6	0.01611	0.01395	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-7	0.02145	0.01883	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-8	0.03156	0.02532	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-9	0.03049	0.02245	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-10	0.03626	0.03244	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.009051	0.006197	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-12	0.02369	0.01953	2	No	10	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.05498	0.04514	2	No	10	0	No	0.01	Param.
Beryllium (mg/L)	GN-GSA-MW-1	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-5	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-6	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-7	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-8	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-9	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-10	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-11	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-12	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-13	0.0015	0.0015	0.004	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-1	0.03477	0.02995	4	No	10	0	No	0.01	Param.
Boron (mg/L)	GN-GSA-MW-5	0.05	0.022	4	No	10	80	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-6	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-7	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-8	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-9	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-10	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Boron (mg/L)	GN-GSA-MW-11	0.0362	0.0295	4	No	10	0	No	0.011	NP (normality)
Boron (mg/L)	GN-GSA-MW-12	0.03588	0.02952	4	No	10	0	No	0.01	Param.
Boron (mg/L)	GN-GSA-MW-13	0.05	0.05	4	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-5	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-9	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)

Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:33 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	GN-GSA-MW-12	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-1	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.005	0.00274	0.01	No	10	30	No	0.011	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-6	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-7	0.01017	0.003095	0.01	No	10	30	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-8	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-9	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-10	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.006162	0.002652	0.01	No	10	0	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-12	0.005	0.005	0.01	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-13	0.01159	0.004651	0.01	No	10	40	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.206	0.7692	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	0.8718	0.1009	5	No	10	10	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	0.9984	0.03359	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.8456	0.0362	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.368	-0.0526	5	No	10	10	No	0.011	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	1.029	0.2135	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	0.8933	0.04601	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.289	-0.02995	5	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	0.9233	0.1044	5	No	10	10	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	0.8321	-0.03163	5	No	10	10	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-1	0.3525	0.2879	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-5	0.1	0.028	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-6	0.15	0.036	4	No	11	54.55	No	0.006	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-7	0.1066	0.07434	4	No	11	9.091	ln(x)	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1613	0.1158	4	No	11	0	x^2	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.1	0.035	4	No	11	18.18	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-10	0.1	0.02	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-11	0.3343	0.03871	4	No	11	36.36	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-12	0.095	0.05	4	No	11	9.091	No	0.006	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.085	0.039	4	No	11	0	No	0.006	NP (normality)
Lead (mg/L)	GN-GSA-MW-1	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-5	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-7	0.0025	0.00229	0.015	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-8	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-9	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-10	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-11	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-12	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.0025	0.0025	0.015	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-5	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-6	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-7	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-8	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-9	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-10	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-11	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-12	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-13	0.025	0.025	0.05	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-1	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-5	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-6	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-7	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-8	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-9	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-10	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-11	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-12	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-13	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-1	0.01852	0.007824	0.1	No	10	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-5	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-6	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-7	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-8	0.00446	0.003358	0.1	No	10	0	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)

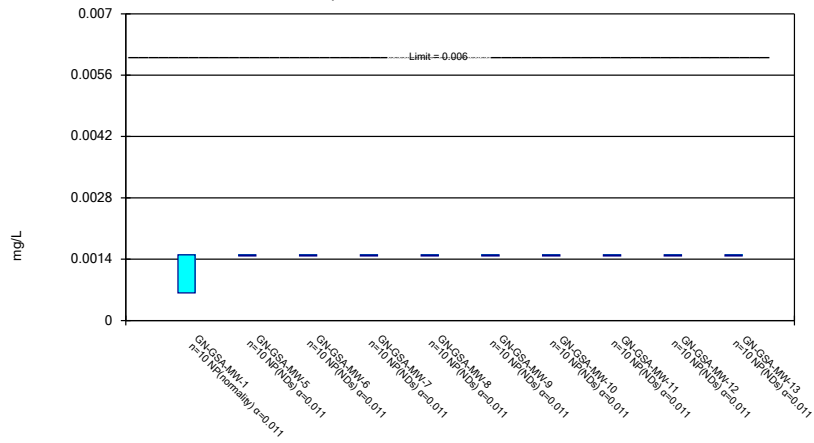
Confidence Intervals - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:33 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Molybdenum (mg/L)	GN-GSA-MW-10	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-11	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-12	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-13	0.005	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-1	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-5	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-6	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-7	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-8	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-9	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-10	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-11	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-12	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-13	0.005	0.005	0.05	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.002	No	10	100	No	0.011	NP (NDs)

Non-Parametric Confidence Interval

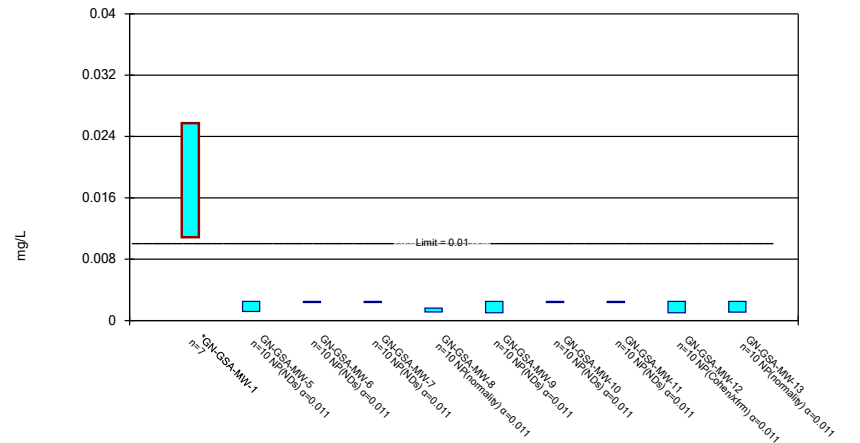
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Constituent: Antimony Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

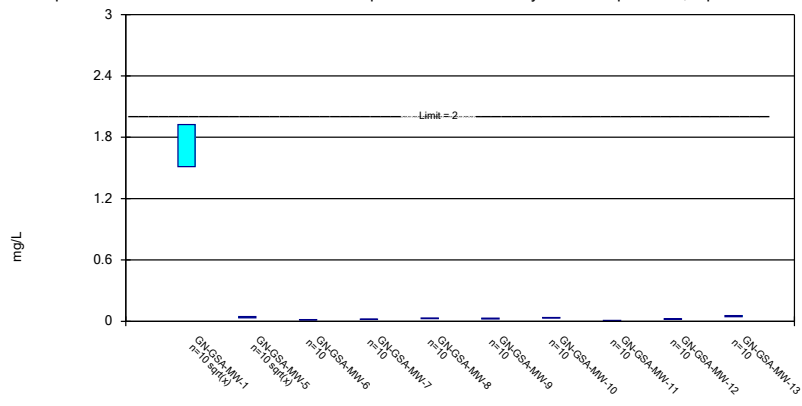
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric Confidence Interval

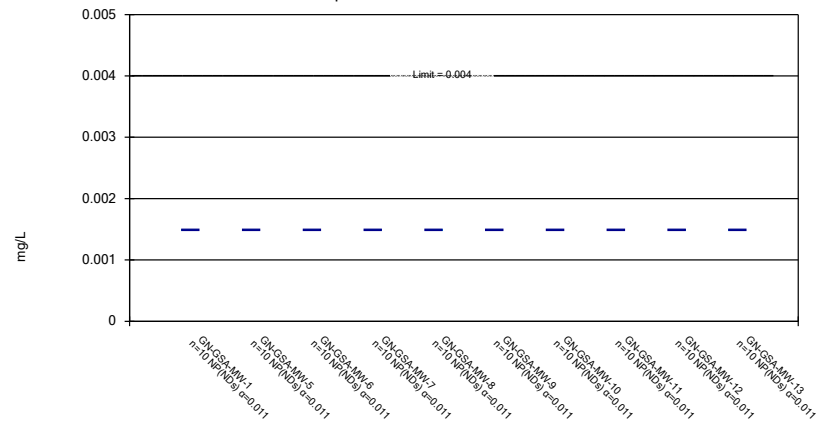
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Constituent: Barium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

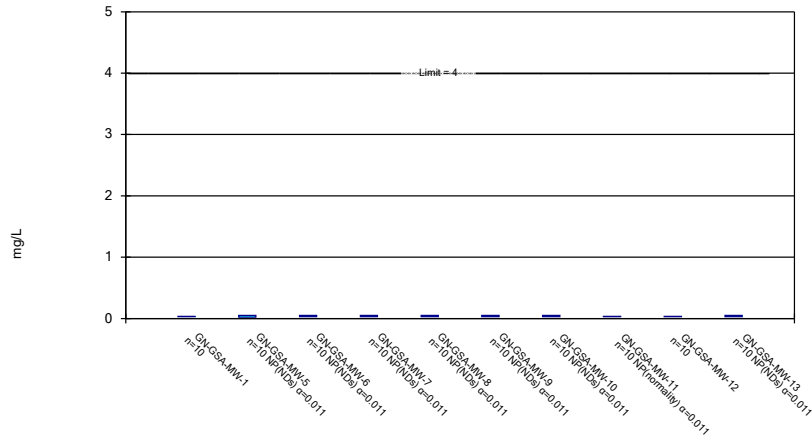
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

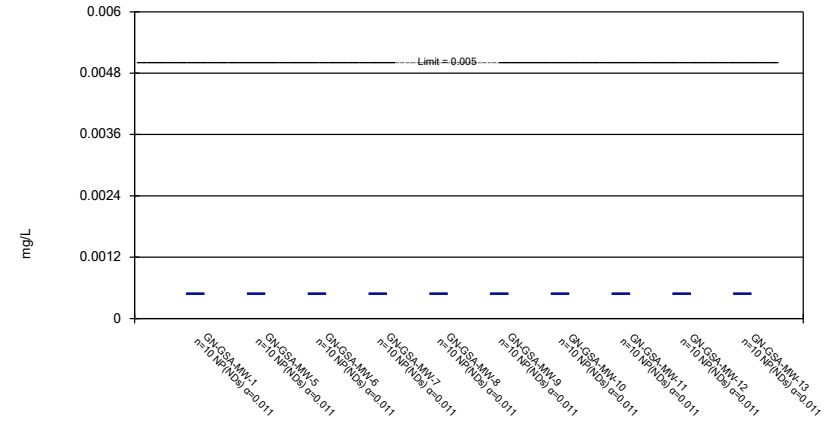
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Boron Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
 Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

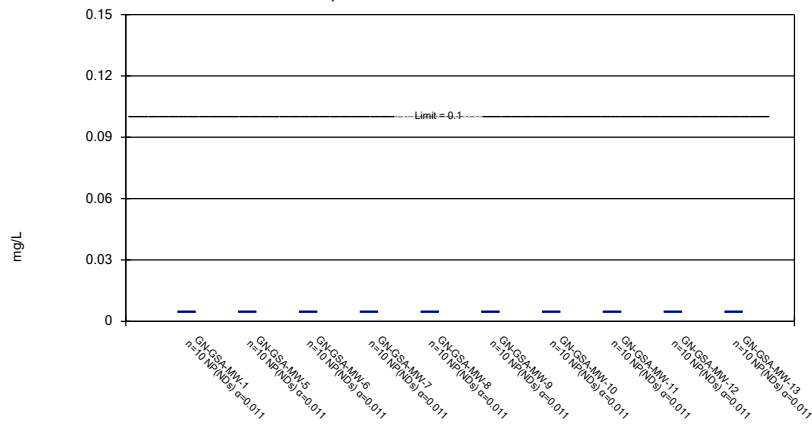
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
 Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

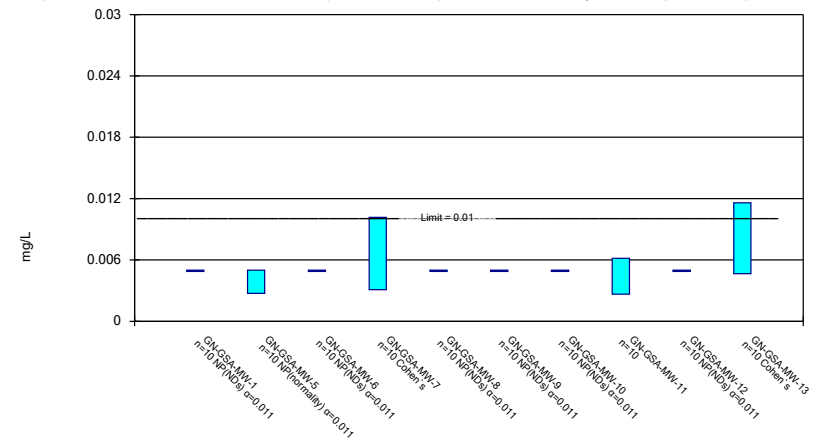
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
 Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

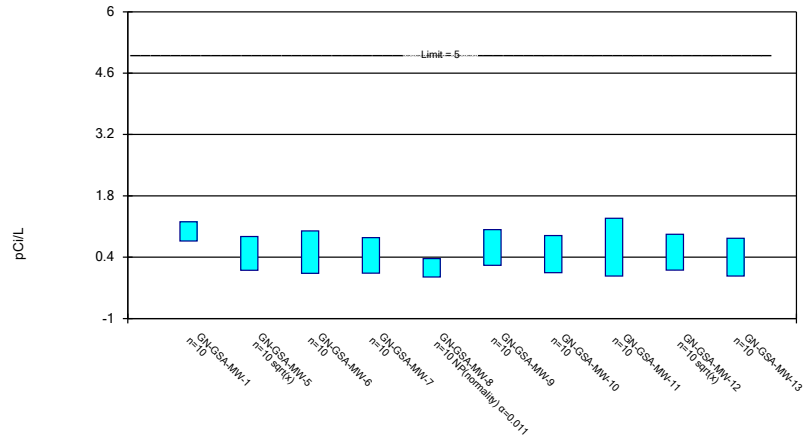
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
 Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

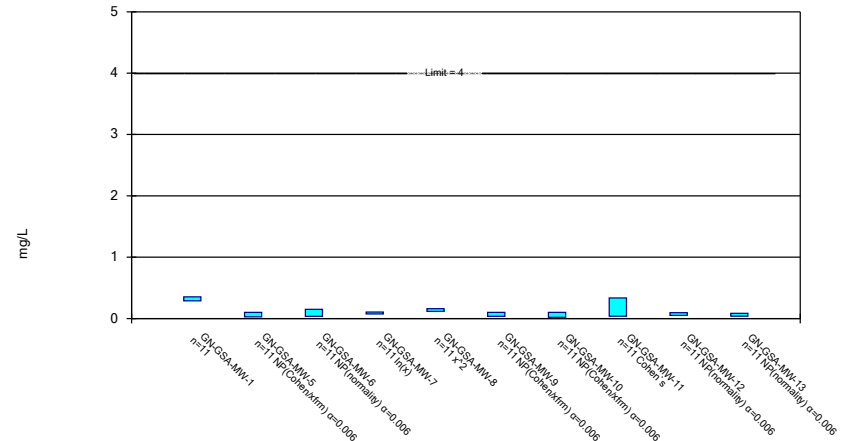
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

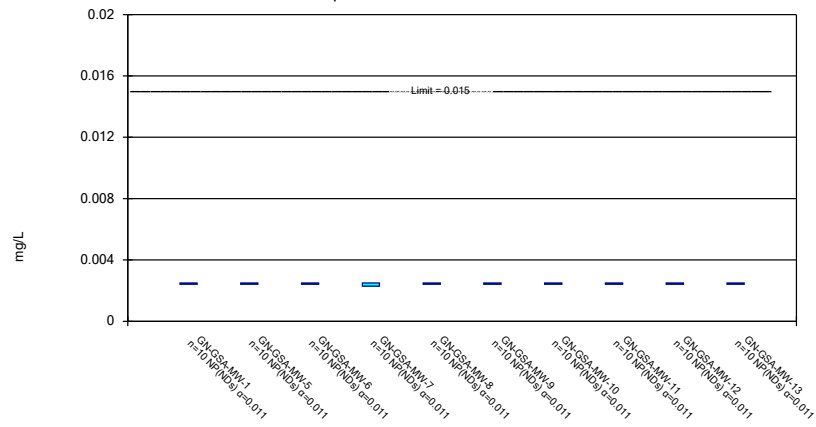
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

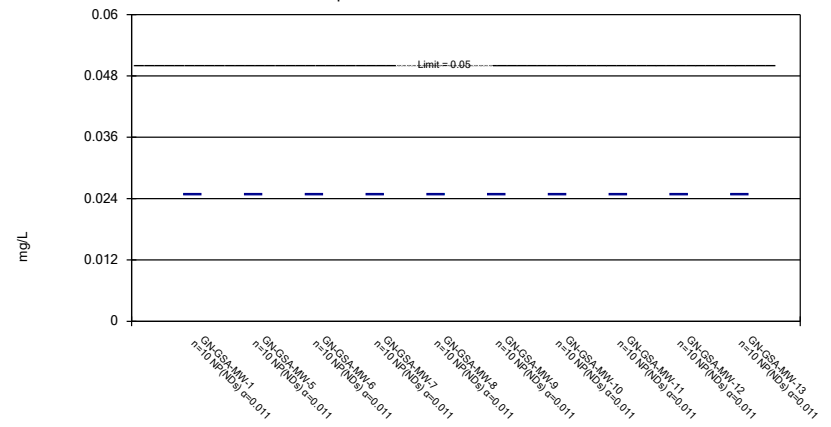
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

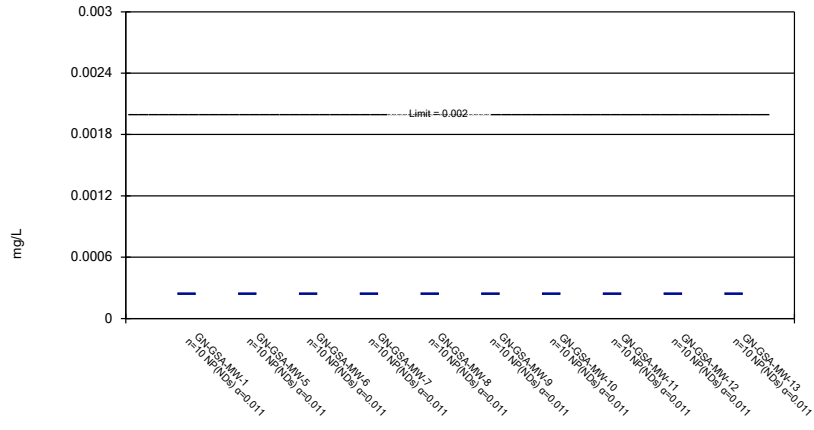
Compliance Limit is not exceeded.



Constituent: Lithium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

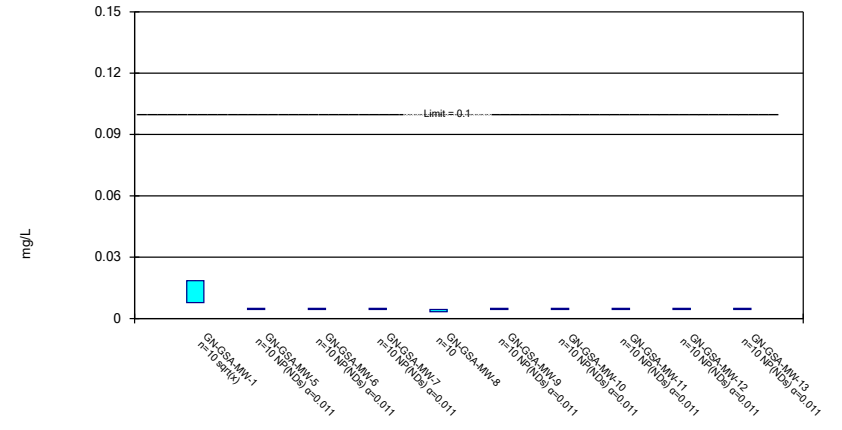
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

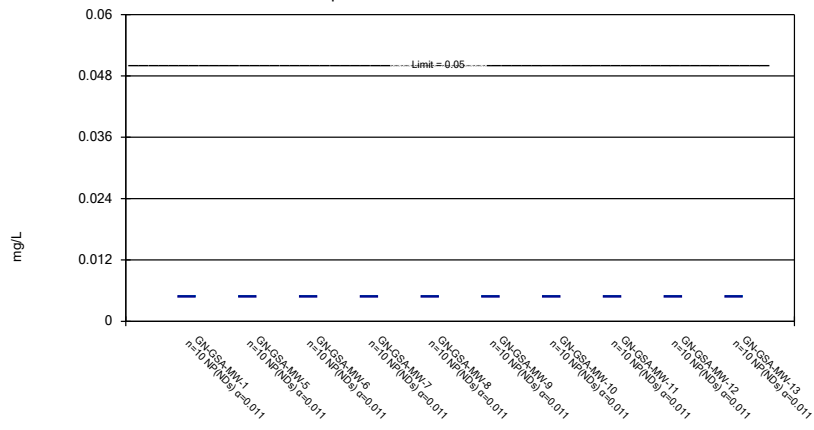
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

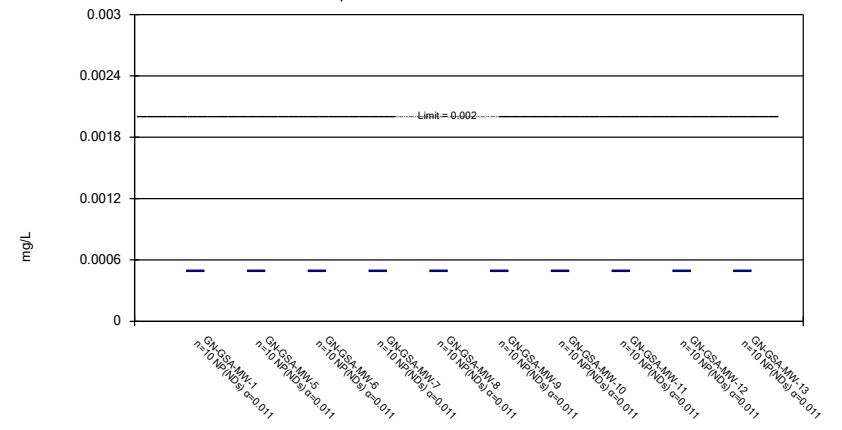
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/31/2019 11:32 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

2nd Semi-Annual

Interwell Prediction Limit Summary Table - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 1:38 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDsND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	GN-GSA-MW-1	0.111	n/a	10/23/2018	0.39	Yes	48	n/a	n/a	35.42	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-8	0.111	n/a	10/22/2018	0.15	Yes	48	n/a	n/a	35.42	n/a	0.0008027	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-1	7.53	5.84	10/23/2018	7.65	Yes	48	n/a	n/a	0	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-6	7.53	5.84	10/22/2018	4.68	Yes	48	n/a	n/a	0	n/a	0.001605	NP Inter (normality) 1 of 2

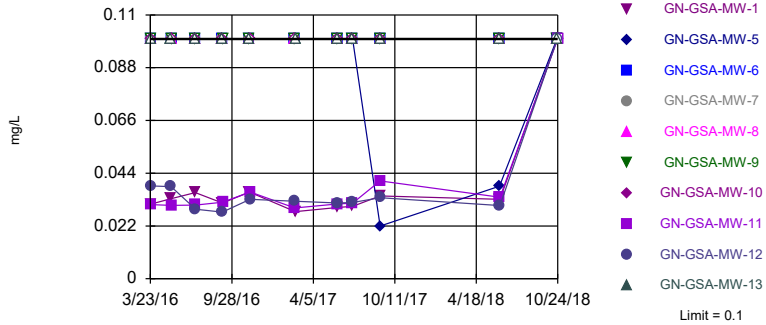
Interwell Prediction Limit Summary Table - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 1:38 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Boron (mg/L)	GN-GSA-MW-1	0.1	n/a	10/23/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-5	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-6	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-7	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-8	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-9	0.1	n/a	10/22/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-10	0.1	n/a	10/24/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-11	0.1	n/a	10/24/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-12	0.1	n/a	10/23/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Boron (mg/L)	GN-GSA-MW-13	0.1	n/a	10/23/2018	0.1ND	No	44	n/a	n/a	97.73 n/a	n/a	0.0009524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-1	0.111	n/a	10/23/2018	0.39	Yes	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-5	0.111	n/a	10/22/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-6	0.111	n/a	10/22/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-7	0.111	n/a	10/22/2018	0.1	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-8	0.111	n/a	10/22/2018	0.15	Yes	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-9	0.111	n/a	10/22/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-10	0.111	n/a	10/24/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-11	0.111	n/a	10/24/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-12	0.111	n/a	10/23/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GN-GSA-MW-13	0.111	n/a	10/23/2018	0.1ND	No	48	n/a	n/a	35.42 n/a	n/a	0.0008027	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-1	7.53	5.84	10/23/2018	7.65	Yes	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-5	7.53	5.84	10/22/2018	6.48	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-6	7.53	5.84	10/22/2018	4.68	Yes	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-7	7.53	5.84	10/22/2018	6.71	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-8	7.53	5.84	10/22/2018	7.33	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-9	7.53	5.84	10/22/2018	6.86	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-10	7.53	5.84	10/24/2018	7.14	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-11	7.53	5.84	10/24/2018	6.09	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-12	7.53	5.84	10/23/2018	7.22	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2
pH (pH)	GN-GSA-MW-13	7.53	5.84	10/23/2018	7.09	No	48	n/a	n/a	0 n/a	n/a	0.001605	NP Inter (normality) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

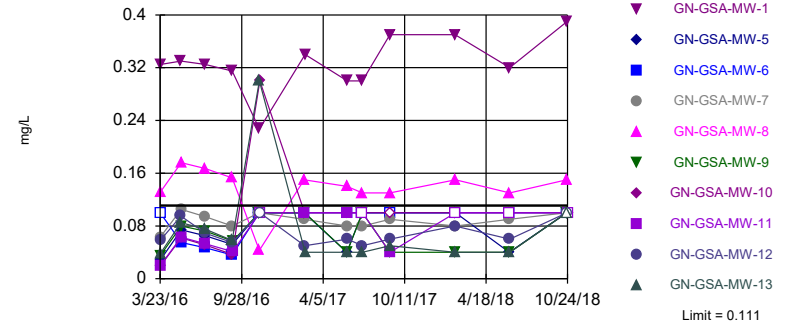


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 44 background values. 97.73% NDs. Annual per-constituent alpha = 0.02075. Individual comparison alpha = 0.0009524 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

Constituent: Boron Analysis Run 12/18/2018 1:35 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit: GN-GSA-MW-1, GN-GSA-MW-8

Prediction Limit
Interwell Non-parametric

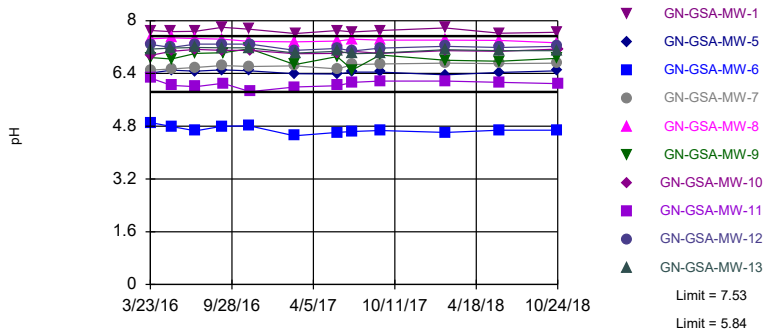


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. 35.42% NDs. Annual per-constituent alpha = 0.01751. Individual comparison alpha = 0.0008027 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

Constituent: Fluoride Analysis Run 12/18/2018 1:35 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limits: GN-GSA-MW-1, GN-GSA-MW-6

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 48 background values. Annual per-constituent alpha = 0.03502. Individual comparison alpha = 0.001605 (1 of 2). Comparing 10 points to limit. Assumes 1 future value.

Constituent: pH Analysis Run 12/18/2018 1:35 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-9	GN-GSA-MW-7	GN-GSA-MW-11	GN-GSA-MW-6	GN-GSA-MW-12	GN-GSA-MW-3 (bg)	GN-GSA-MW-5	GN-GSA-MW-1
3/23/2016	<0.1	<0.1	<0.1	0.0309 (J)	<0.1	0.0387 (J)	<0.1	<0.1	
3/24/2016									0.0311 (J)
5/10/2016	<0.1					0.0384 (J)	<0.1		0.0334 (J)
5/11/2016		<0.1	<0.1	0.0306 (J)	<0.1			<0.1	
7/5/2016	<0.1								0.0359 (J)
7/6/2016		<0.1	<0.1	0.0307 (J)	<0.1	0.029 (J)	<0.1	<0.1	
8/23/2016									
9/6/2016	<0.1		<0.1		<0.1	0.0278 (J)		<0.1	0.0316 (J)
9/7/2016		<0.1		0.0319 (J)			<0.1		
11/8/2016	<0.1	<0.1	<0.1		<0.1		<0.1	<0.1	0.0361 (J)
11/9/2016				0.0362 (J)		0.0331 (J)			
1/3/2017									
2/20/2017			<0.1		<0.1		<0.1	<0.1	
2/21/2017	<0.1	<0.1		0.0295 (J)		0.0323 (J)			
2/22/2017									0.028 (J)
5/30/2017		<0.1			<0.1			<0.1	
5/31/2017	<0.1		<0.1	0.0312 (J)		0.0316 (J)	<0.1		0.0297 (J)
7/5/2017	<0.1	<0.1	<0.1	0.0315 (J)	<0.1	0.0318 (J)	<0.1	<0.1	0.0302 (J)
9/5/2017	<0.1						<0.1		
9/7/2017		<0.1	<0.1	0.0408 (J)	<0.1	0.0338 (J)		0.022 (J)	0.0345 (J)
6/11/2018			<0.1		<0.1			0.0386 (J)	
6/12/2018	<0.1	<0.1		0.034 (J)		0.0305 (J)	<0.1		0.0331 (J)
10/22/2018	<0.1	<0.1	<0.1		<0.1			<0.1 (J)	
10/23/2018						<0.1 (J)	<0.1		<0.1 (J)
10/24/2018				<0.1 (J)					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-10	GN-GSA-MW-13	GN-GSA-MW-14S...GN-GSA-MW-15 ...	
3/23/2016					
3/24/2016	<0.1	<0.1	<0.1		
5/10/2016			<0.1		
5/11/2016	<0.1	<0.1			
7/5/2016				<0.1	
7/6/2016	<0.1	<0.1	<0.1		<0.1
8/23/2016				<0.1	<0.1
9/6/2016	<0.1	<0.1	<0.1		
9/7/2016				<0.1	<0.1
11/8/2016	<0.1		<0.1	<0.1	<0.1
11/9/2016		<0.1			
1/3/2017				0.0211 (J)	<0.1
2/20/2017	<0.1				<0.1
2/21/2017		<0.1		<0.1	
2/22/2017			<0.1		
5/30/2017	<0.1				
5/31/2017		<0.1	<0.1	<0.1	<0.1
7/5/2017	<0.1	<0.1	<0.1	<0.1	<0.1
9/5/2017				<0.1	<0.1
9/7/2017	<0.1	<0.1	<0.1		
6/11/2018					
6/12/2018	<0.1	<0.1	<0.1	<0.1	<0.1
10/22/2018	<0.1				
10/23/2018			<0.1	<0.1	<0.1
10/24/2018		<0.1			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-3 (bg)	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-9	GN-GSA-MW-5	GN-GSA-MW-8
3/23/2016	0.022 (J)	<0.1	0.063 (J)	0.06 (J)	0.02 (J)	0.058 (J)	0.035 (J)	0.028 (J)	
3/24/2016									0.132 (J)
5/10/2016	0.068 (J)			0.111 (J)		0.095 (J)			
5/11/2016		0.055 (J)	0.105 (J)		0.063 (J)		0.08 (J)	0.074 (J)	0.176 (J)
7/5/2016	0.052 (J)								
7/6/2016		0.047 (J)	0.094 (J)	0.089 (J)	0.053 (J)	0.069 (J)	0.072 (J)	0.065 (J)	0.167 (J)
8/23/2016									
9/6/2016	0.038 (J)	0.036 (J)	0.08 (J)			0.055 (J)		0.052 (J)	0.153 (J)
9/7/2016				0.073 (J)	0.041 (J)		0.057 (J)		
11/8/2016	<0.1	<0.1	<0.1	<0.1			<0.1	<0.1	0.043 (J)
11/9/2016					<0.1	<0.1			
1/3/2017									
2/20/2017		0.1	0.09 (J)	0.05 (J)				0.1	0.15
2/21/2017	0.1				0.1	0.05 (J)	0.1		
2/22/2017									
5/30/2017		0.1					0.04 (J)	0.04 (J)	0.14
5/31/2017	0.1		0.08 (J)	0.06 (J)	0.1	0.06 (J)			
7/5/2017	<0.1	<0.1	0.08 (J)	0.05 (J)	<0.1	0.05 (J)	<0.1	<0.1	0.13
9/5/2017	<0.1			0.06 (J)					
9/7/2017		<0.1	0.09 (J)		0.04 (J)	0.06 (J)	0.04 (J)	<0.1	0.13
2/5/2018	0.04 (J)					0.08 (J)			
2/6/2018		<0.1	0.08 (J)	0.06 (J)	<0.1		0.04 (J)	<0.1	0.15
2/7/2018									
6/11/2018		<0.1	0.09 (J)					0.04 (J)	
6/12/2018	<0.1			0.05 (J)	<0.1	0.06 (J)	0.04 (J)		0.13
10/22/2018	<0.1	<0.1	0.1				<0.1 (J)	<0.1 (J)	0.15
10/23/2018				<0.1 (J)		<0.1 (J)			
10/24/2018					<0.1				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell
 Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-13	GN-GSA-MW-1	GN-GSA-MW-14S...	GN-GSA-MW-15 ...
3/23/2016					
3/24/2016	0.02 (J)	0.039 (J)	0.325		
5/10/2016		0.085 (J)	0.33		
5/11/2016	0.062 (J)				
7/5/2016			0.325	0.072 (J)	
7/6/2016	0.051 (J)	0.075 (J)			0.062 (J)
8/23/2016				0.066 (J)	0.045 (J)
9/6/2016	0.037 (J)	0.058 (J)	0.315		
9/7/2016				0.062 (J)	0.042 (J)
11/8/2016		0.3 (U)	0.227 (J)	<0.1	<0.1
11/9/2016	0.3 (U)				
1/3/2017				<0.1	<0.1
2/20/2017					0.1
2/21/2017	0.1			0.1	
2/22/2017		0.04 (J)	0.34		
5/30/2017					
5/31/2017	0.1	0.04 (J)	0.3	0.06 (J)	0.1
7/5/2017	<0.1	0.04 (J)	0.3	0.04 (J)	<0.1
9/5/2017				0.06 (J)	<0.1
9/7/2017	<0.1	0.05 (J)	0.37		
2/5/2018		0.04 (J)	0.37		
2/6/2018	<0.1			0.06 (J)	
2/7/2018					<0.1
6/11/2018					
6/12/2018	<0.1	0.04 (J)	0.32	0.05 (J)	<0.1
10/22/2018					
10/23/2018		<0.1 (J)	0.39	<0.1 (J)	<0.1
10/24/2018	<0.1				

Prediction Limit

Constituent: pH (pH) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2 (bg)	GN-GSA-MW-6	GN-GSA-MW-7	GN-GSA-MW-3 (bg)	GN-GSA-MW-11	GN-GSA-MW-12	GN-GSA-MW-9	GN-GSA-MW-5	GN-GSA-MW-8
3/23/2016	7.18	4.91	6.5	6.83	6.26	7.28	6.88	6.41	
3/24/2016									7.45
5/10/2016	7.2			6.84		7.19			
5/11/2016		4.79	6.54		6.04		6.84	6.5	7.48
7/5/2016	7.15								
7/6/2016		4.66	6.58	6.94	6	7.29	7.01	6.47	7.46
8/23/2016									
9/6/2016	7.17	4.8	6.64			7.29		6.51	7.44
9/7/2016				6.84	6.1		7.03		
11/8/2016	7.12	4.81	6.61	6.84			7.15	6.48	7.37
11/9/2016					5.85	7.29			
1/3/2017									
2/20/2017		4.51	6.63	7.04				6.39	7.36
2/21/2017	7.12				5.99	7.1	6.67		
2/22/2017									
5/30/2017		4.61					6.91	6.38	7.38
5/31/2017	7.17		6.54	6.91	6.03	7.16			
7/5/2017	7.18	4.64	6.67	7.02	6.13	7.08	6.51	6.44	7.44
9/5/2017	7.17			6.78					
9/7/2017		4.67	6.69		6.17	7.17	6.96	6.44	7.41
2/5/2018	7.12					7.22			
2/6/2018		4.61	6.71	6.96	6.17		6.8	6.36	7.41
2/7/2018									
6/11/2018		4.68	6.7					6.43	
6/12/2018	7.19			6.76	6.13	7.19	6.77		7.4
10/22/2018	7.06	4.68	6.71				6.86	6.48	7.33
10/23/2018				6.59		7.22			
10/24/2018					6.09				

Prediction Limit

Constituent: pH (pH) Analysis Run 12/18/2018 1:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-13	GN-GSA-MW-1	GN-GSA-MW-14S...	GN-GSA-MW-15 ...
3/23/2016					
3/24/2016	6.95	7.14	7.7		
5/10/2016		7.17	7.67		
5/11/2016	7.07				
7/5/2016			7.68	7.44	
7/6/2016	7.13	7.19			6.1
8/23/2016				7.47	5.87
9/6/2016	7.1	7.18	7.8		
9/7/2016				7.51	5.92
11/8/2016		7.18	7.74	7.37	5.91
11/9/2016	7.1				
1/3/2017				7.37	5.93
2/20/2017					5.91
2/21/2017	7			7.41	
2/22/2017		7.02	7.61		
5/30/2017					
5/31/2017	7.01	7.07	7.7	7.47	6
7/5/2017	7.07	7	7.66	7.5	6
9/5/2017				7.39	5.9
9/7/2017	7.01	7.02	7.7		
2/5/2018		7.12	7.78		
2/6/2018	7.09			7.47	
2/7/2018					5.86
6/11/2018					
6/12/2018	7.07	7.09	7.62	7.53	6.05
10/22/2018					
10/23/2018		7.09	7.65	7.4	5.84
10/24/2018	7.14				

Intrawell Prediction Limit Summary Table - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:05 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDsND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GN-GSA-MW-1	38.37	n/a	10/23/2018	38.9	Yes	9	35.73	1.237	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-10	99.41	n/a	10/24/2018	104	Yes	9	92.19	3.387	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-13	96.63	n/a	10/23/2018	97.6	Yes	9	83.12	6.337	0	None	No	0.0006839 Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-2	87.97	n/a	10/22/2018	96.9	Yes	9	79.02	4.196	0	None	No	0.0006839 Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-11	6.745	n/a	10/24/2018	7.2	Yes	9	4.269	1.162	0	None	No	0.0006839 Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-5	31.02	n/a	10/22/2018	40	Yes	9	15.51	7.278	0	None	No	0.0006839 Param 1 of 3
TDS (mg/L)	GN-GSA-MW-5	269.4	n/a	10/22/2018	292	Yes	9	203.3	30.98	0	None	No	0.0006839 Param 1 of 3

Intrawell Prediction Limit Summary Table - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:05 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	38.37	n/a	10/23/2018	38.9	Yes	9	35.73	1.237	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-10	99.41	n/a	10/24/2018	104	Yes	9	92.19	3.387	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-11	15.57	n/a	10/24/2018	7.73	No	9	10.82	2.23	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-12	75.87	n/a	10/23/2018	64.3	No	9	66.13	4.568	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-13	96.63	n/a	10/23/2018	97.6	Yes	9	83.12	6.337	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-14S	56.07	n/a	10/23/2018	44.4	No	9	49.4	3.13	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-15	10.8	n/a	10/23/2018	5.94	No	9	8.347	1.15	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-2	87.97	n/a	10/22/2018	96.9	Yes	9	79.02	4.196	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-3	114.2	n/a	10/23/2018	68.8	No	9	96.47	8.312	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-5	65.71	n/a	10/22/2018	60.6	No	9	52.77	6.075	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-6	1.54	n/a	10/22/2018	0.79	No	9	1.013	0.2472	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-7	72.45	n/a	10/22/2018	70.3	No	9	63.62	4.141	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-8	61.65	n/a	10/22/2018	55.4	No	9	56.57	2.387	0	None	No	0.0006839	Param 1 of 3
Calcium (mg/L)	GN-GSA-MW-9	67.03	n/a	10/22/2018	52.4	No	9	50.08	7.955	0	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-1	4.011	n/a	10/23/2018	2.1	No	9	2.554	0.6834	11.11	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-10	4.197	n/a	10/24/2018	2.9	No	9	2.646	0.7282	11.11	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-11	6.745	n/a	10/24/2018	7.2	Yes	9	4.269	1.162	0	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-12	5.623	n/a	10/23/2018	2.1	No	9	3.181	1.146	11.11	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-13	5.021	n/a	10/23/2018	3.5	No	9	3.646	0.6455	0	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-14S	5.523	n/a	10/23/2018	3.4	No	9	4.387	0.5333	0	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-15	4.666	n/a	10/23/2018	1ND	No	9	2.783	0.8834	11.11	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-2	4.891	n/a	10/22/2018	3.6	No	9	3.738	0.5409	0	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-3	3.86	n/a	10/23/2018	2.6	No	9	3.14	0.3379	0	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-5	17	n/a	10/22/2018	14	No	9	n/a	n/a	0	n/a	n/a	0.004675	NP (normality) 1 of 3
Chloride (mg/L)	GN-GSA-MW-6	4.015	n/a	10/22/2018	2.6	No	9	8.785	3.44	11.11	None	x^2	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-7	4.538	n/a	10/22/2018	3.7	No	9	3.468	0.502	0	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-8	2.587	n/a	10/22/2018	1ND	No	9	1.769	0.3837	11.11	None	No	0.0006839	Param 1 of 3
Chloride (mg/L)	GN-GSA-MW-9	3.528	n/a	10/22/2018	2	No	9	2.32	0.567	11.11	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-1	6.414	n/a	10/23/2018	2.5ND	No	9	4.099	1.086	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-10	2.582	n/a	10/24/2018	2.5ND	No	9	1.887	0.326	11.11	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-11	15.03	n/a	10/24/2018	2.5ND	No	9	7.499	3.536	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-12	16.55	n/a	10/23/2018	2.5ND	No	9	9.349	3.38	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-13	10.47	n/a	10/23/2018	6.7	No	9	8.328	1.007	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-14S	18.04	n/a	10/23/2018	5.4	No	9	9.944	3.798	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-15	5.604	n/a	10/23/2018	2.5ND	No	9	3.231	1.113	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-2	10.62	n/a	10/22/2018	8.3	No	9	7.103	1.648	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-3	35.15	n/a	10/23/2018	12	No	9	20.38	6.93	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-5	31.02	n/a	10/22/2018	40	Yes	9	15.51	7.278	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-6	4.369	n/a	10/22/2018	2.5ND	No	9	1.754	1.227	22.22	Kaplan-Meier	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-7	14.51	n/a	10/22/2018	8.8	No	9	10.79	1.745	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-8	2.629	n/a	10/22/2018	2.5ND	No	9	1.843	0.3686	0	None	No	0.0006839	Param 1 of 3
Sulfate (mg/L)	GN-GSA-MW-9	6.386	n/a	10/22/2018	5.1	No	9	5.261	0.528	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-1	242.9	n/a	10/23/2018	195	No	9	198.4	20.85	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-10	267.8	n/a	10/24/2018	265	No	9	251.8	7.496	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-11	112.4	n/a	10/24/2018	68	No	9	75.3	17.43	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-12	275.9	n/a	10/23/2018	201	No	9	222.9	24.89	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-13	333.9	n/a	10/23/2018	279	No	9	255.8	36.67	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-14S	228.5	n/a	10/23/2018	204	No	9	203.1	11.92	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-15	60.28	n/a	10/23/2018	27.3	No	9	44.88	7.227	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-2	311.1	n/a	10/22/2018	278	No	9	287.6	11.06	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-3	355.7	n/a	10/23/2018	215	No	9	306.8	22.93	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-5	269.4	n/a	10/22/2018	292	Yes	9	203.3	30.98	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-6	30	n/a	10/22/2018	25ND	No	9	n/a	n/a	66.67	n/a	n/a	0.004675	NP (NDs) 1 of 3
TDS (mg/L)	GN-GSA-MW-7	255.2	n/a	10/22/2018	209	No	9	218.4	17.24	0	None	No	0.0006839	Param 1 of 3
TDS (mg/L)	GN-GSA-MW-8	204.3	n/a	10/22/2018	184	No	9	191.4	6.023	0	None	No	0.0006839	Param 1 of 3

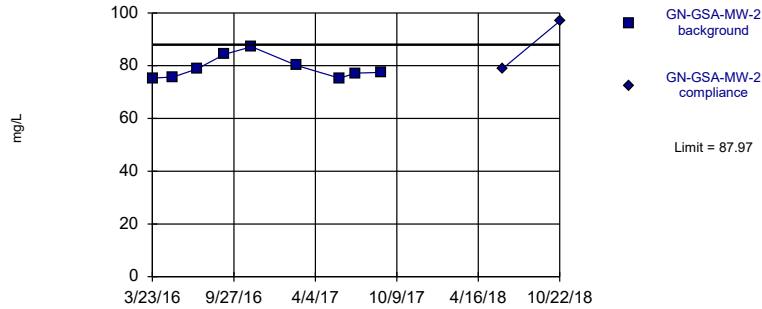
Intrawell Prediction Limit Summary Table - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:05 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDsND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
TDS (mg/L)	GN-GSA-MW-9	212.4	n/a	10/22/2018	177	No	9	167.9	20.88	0	None	No	0.0006839 Param 1 of 3

Exceeds Limit

Prediction Limit
Intrawell Parametric

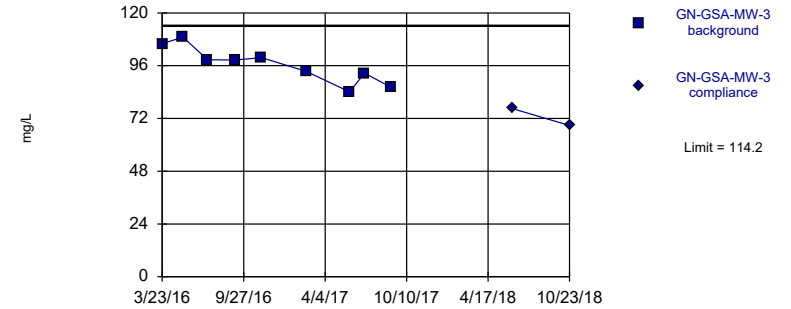


Background Data Summary: Mean=79.02, Std. Dev.=4.196, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8568, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

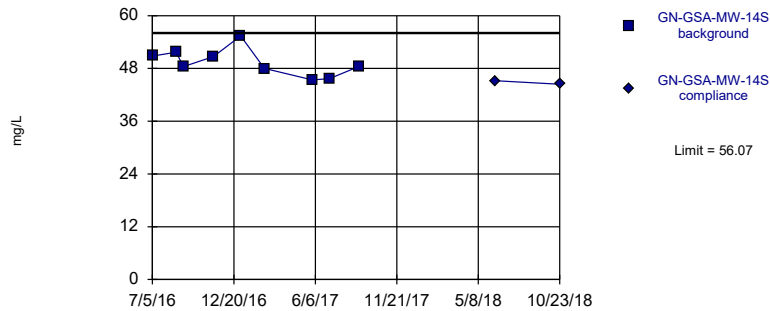


Background Data Summary: Mean=96.47, Std. Dev.=8.312, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9589, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

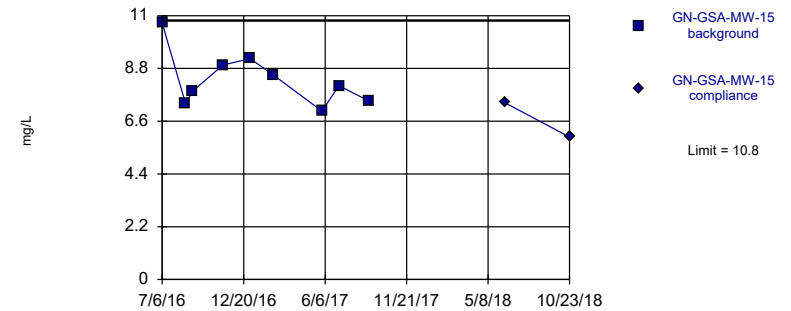


Background Data Summary: Mean=49.4, Std. Dev.=3.13, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9446, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=8.347, Std. Dev.=1.15, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	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

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-14S	GN-GSA-MW-14S
7/5/2016	50.8	
8/23/2016	51.7	
9/7/2016	48.4	
11/8/2016	50.7	
1/3/2017	55.4	
2/21/2017	48	
5/31/2017	45.4	
7/5/2017	45.7	
9/5/2017	48.5	
6/12/2018		45.2
10/23/2018		44.4

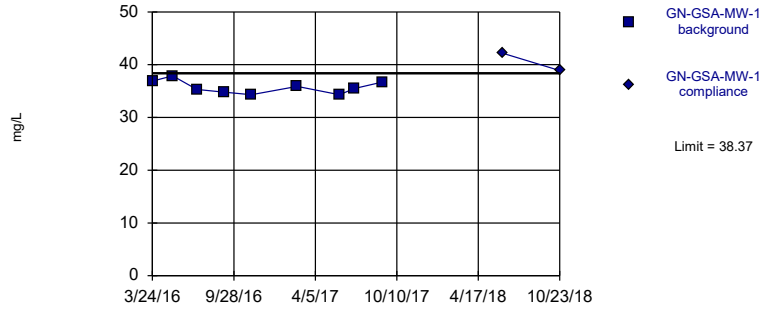
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-15	GN-GSA-MW-15
7/6/2016	10.7	
8/23/2016	7.34	
9/7/2016	7.86	
11/8/2016	8.94	
1/3/2017	9.21	
2/20/2017	8.53	
5/31/2017	7.02	
7/5/2017	8.08	
9/5/2017	7.44	
6/12/2018		7.37
10/23/2018		5.94

Exceeds Limit

Prediction Limit
Intrawell Parametric

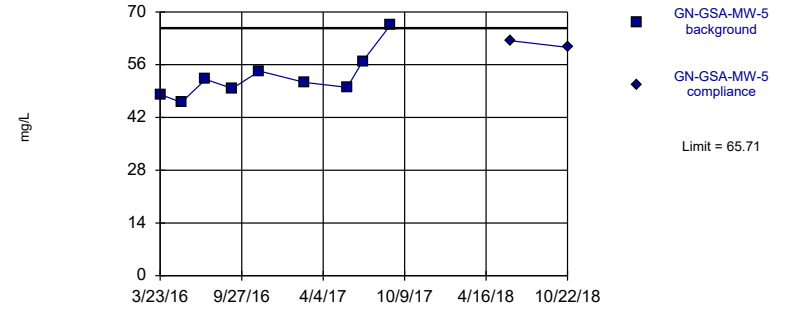


Background Data Summary: Mean=35.73, Std. Dev.=1.237, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9419, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

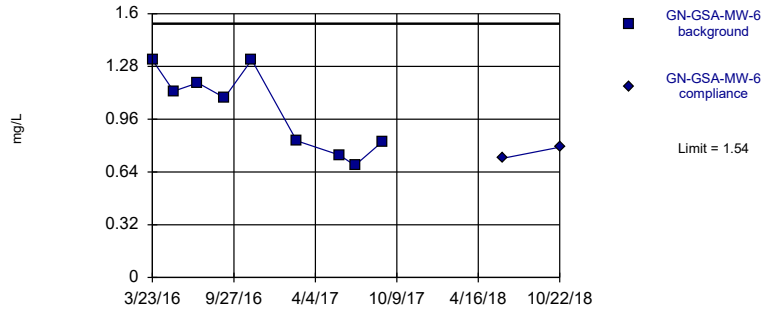


Background Data Summary: Mean=52.77, Std. Dev.=6.075, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8706, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

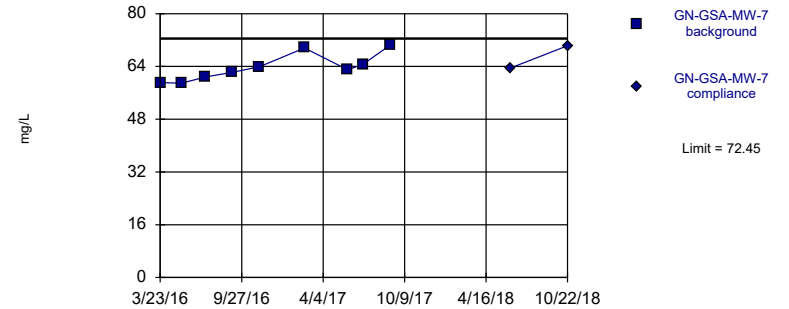


Background Data Summary: Mean=1.013, Std. Dev.=0.2472, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.898, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=63.62, Std. Dev.=4.141, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9059, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	36.9	
5/10/2016	37.9	
7/5/2016	35.3	
9/6/2016	34.8	
11/8/2016	34.3	
2/22/2017	35.9	
5/31/2017	34.3	
7/5/2017	35.5	
9/7/2017	36.7	
6/12/2018		42.2
10/23/2018		38.9

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	48.1	
5/11/2016	46	
7/6/2016	52.1	
9/6/2016	49.7	
11/8/2016	54.3	
2/20/2017	51.3	
5/30/2017	50	
7/5/2017	56.9	
9/7/2017	66.5	
6/11/2018		62.4
10/22/2018		60.6

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-6	GN-GSA-MW-6
3/23/2016	1.32	
5/11/2016	1.13	
7/6/2016	1.18	
9/6/2016	1.09	
11/8/2016	1.32	
2/20/2017	0.829	
5/30/2017	0.743	
7/5/2017	0.68	
9/7/2017	0.825	
6/11/2018		0.722
10/22/2018		0.79

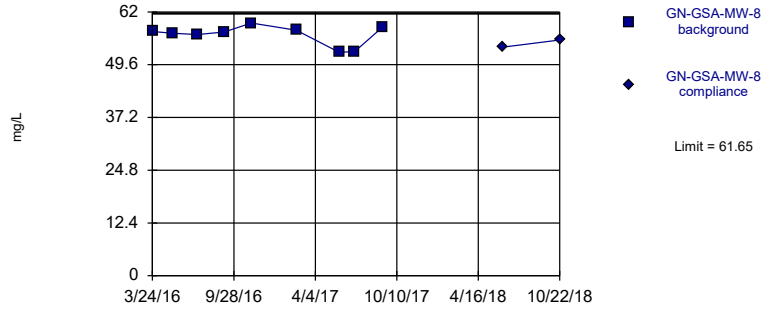
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	59.1	
5/11/2016	58.9	
7/6/2016	60.8	
9/6/2016	62.2	
11/8/2016	63.9	
2/20/2017	69.6	
5/31/2017	63	
7/5/2017	64.6	
9/7/2017	70.5	
6/11/2018		63.5
10/22/2018		70.3

Within Limit

Prediction Limit
Intrawell Parametric

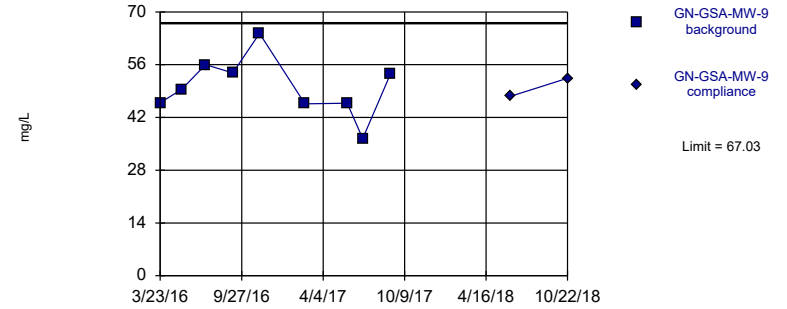


Background Data Summary: Mean=56.57, Std. Dev.=2.387, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8287, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

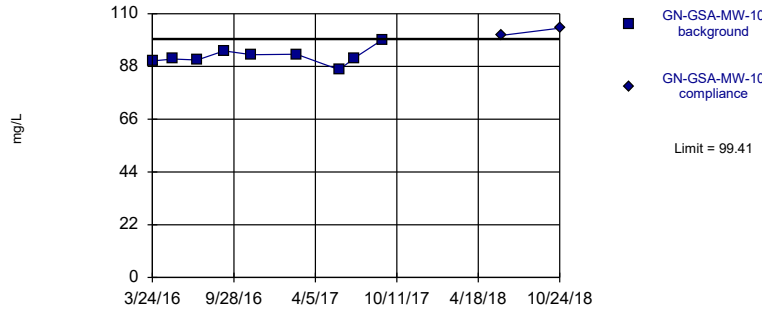


Background Data Summary: Mean=50.08, Std. Dev.=7.955, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9649, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit
Intrawell Parametric

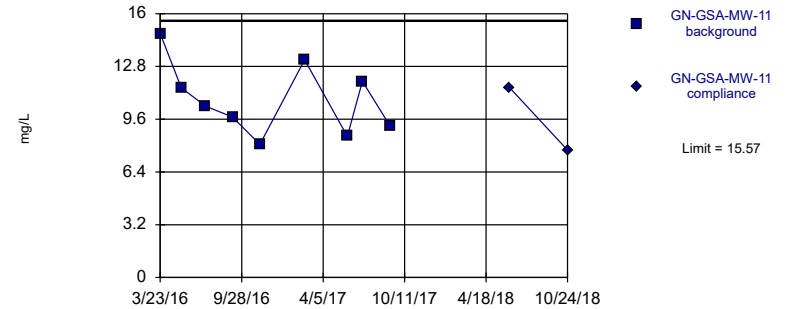


Background Data Summary: Mean=92.19, Std. Dev.=3.387, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9444, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=10.82, Std. Dev.=2.23, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9564, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-8
3/24/2016	57.4	
5/11/2016	57	
7/6/2016	56.7	
9/6/2016	57.3	
11/8/2016	59.4	
2/20/2017	57.7	
5/30/2017	52.5	
7/5/2017	52.7	
9/7/2017	58.4	
6/12/2018		53.7
10/22/2018		55.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	45.9	
5/11/2016	49.4	
7/6/2016	56	
9/7/2016	53.8	
11/8/2016	64.3	
2/21/2017	45.6	
5/30/2017	45.8	
7/5/2017	36.4	
9/7/2017	53.5	
6/12/2018		47.6
10/22/2018		52.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-10
3/24/2016	90.3	
5/11/2016	91.1	
7/6/2016	90.7	
9/6/2016	94.5	
11/9/2016	92.9	
2/21/2017	93.1	
5/31/2017	86.6	
7/5/2017	91.5	
9/7/2017	99	
6/12/2018		101
10/24/2018		104

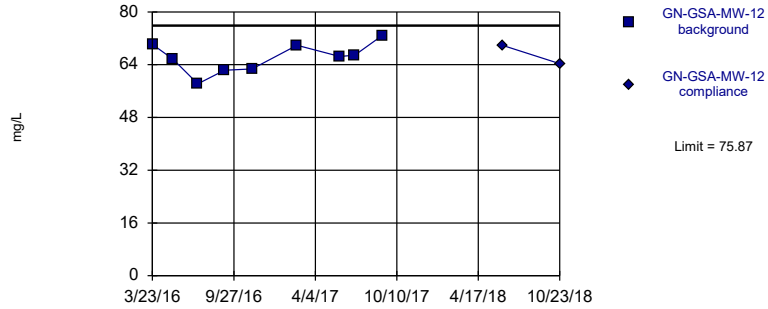
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-11
3/23/2016	14.8	
5/11/2016	11.5	
7/6/2016	10.4	
9/7/2016	9.73	
11/9/2016	8.07	
2/21/2017	13.2	
5/31/2017	8.56	
7/5/2017	11.9	
9/7/2017	9.2	
6/12/2018		11.5
10/24/2018		7.73

Within Limit

Prediction Limit Intrawell Parametric

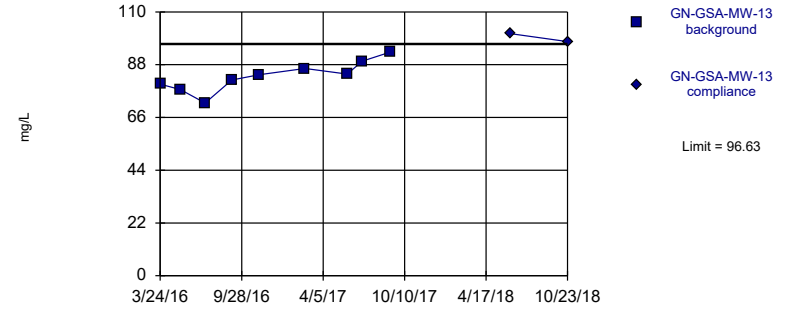


Background Data Summary: Mean=66.13, Std. Dev.=4.568, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9759, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit Intrawell Parametric

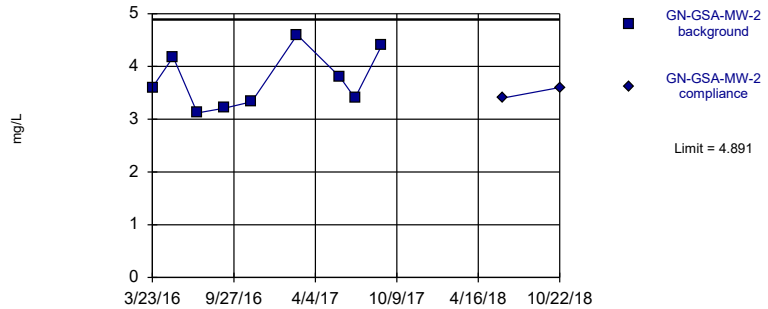


Background Data Summary: Mean=83.12, Std. Dev.=6.337, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9932, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Calcium Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit Intrawell Parametric

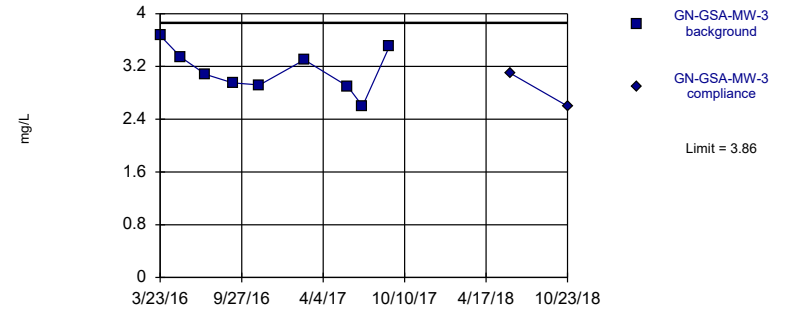


Background Data Summary: Mean=3.738, Std. Dev.=0.5409, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9147, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit Intrawell Parametric



Background Data Summary: Mean=3.14, Std. Dev.=0.3379, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.969, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:39 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-12
3/23/2016	70.2	
5/10/2016	65.6	
7/6/2016	58.2	
9/6/2016	62.3	
11/9/2016	62.7	
2/21/2017	69.9	
5/31/2017	66.5	
7/5/2017	66.9	
9/7/2017	72.9	
6/12/2018		69.9
10/23/2018		64.3

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-13	GN-GSA-MW-13
3/24/2016	79.9	
5/10/2016	77.6	
7/6/2016	72	
9/6/2016	81.6	
11/8/2016	83.8	
2/22/2017	86.4	
5/31/2017	84.1	
7/5/2017	89.5	
9/7/2017	93.2	
6/12/2018		101
10/23/2018		97.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	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

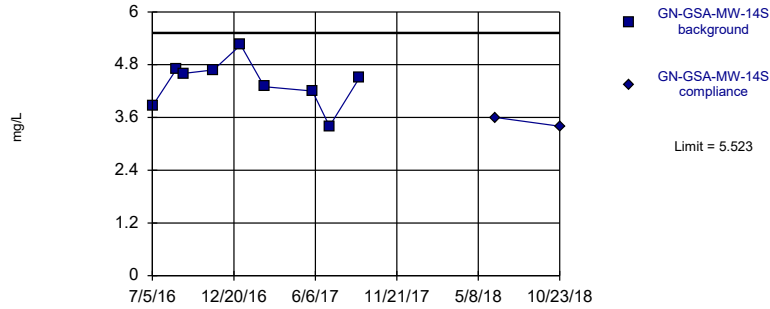
Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-3	GN-GSA-MW-3
3/23/2016	3.67	
5/10/2016	3.34	
7/6/2016	3.08	
9/7/2016	2.95	
11/8/2016	2.92	
2/20/2017	3.3	
5/31/2017	2.9	
7/5/2017	2.6	
9/5/2017	3.5	
6/12/2018		3.1
10/23/2018		2.6

Within Limit

Prediction Limit
Intrawell Parametric

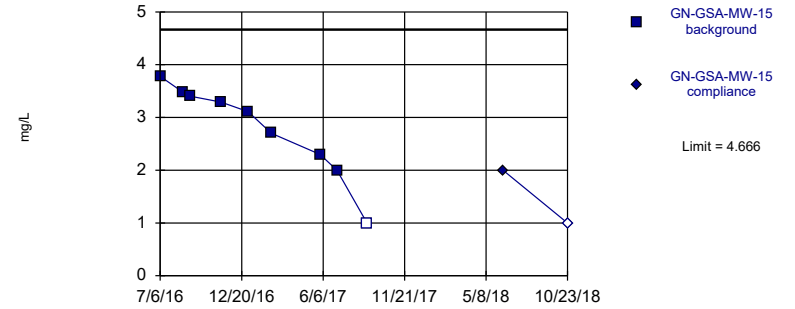


Background Data Summary: Mean=4.387, Std. Dev.=0.5333, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9651, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

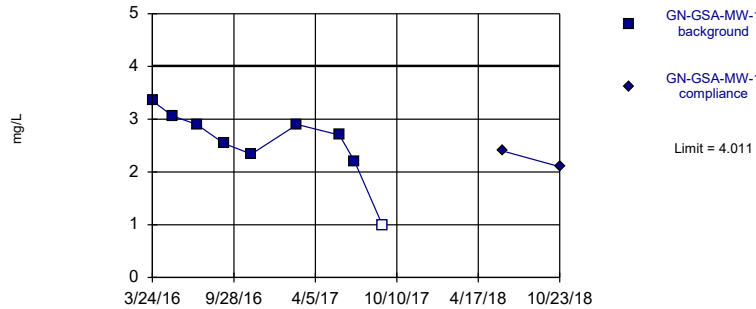


Background Data Summary: Mean=2.783, Std. Dev.=0.8834, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9126, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

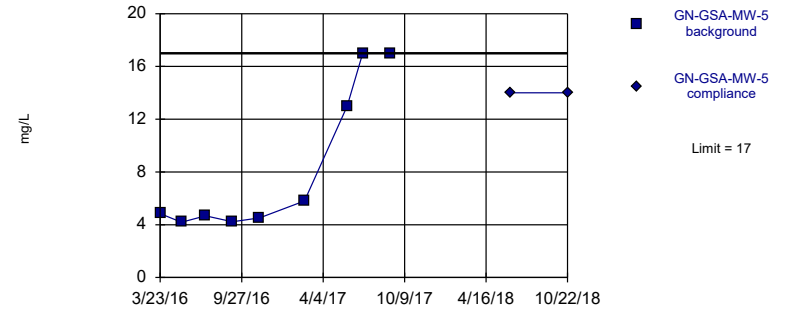


Background Data Summary: Mean=2.554, Std. Dev.=0.6834, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8742, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - 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 the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-14S	GN-GSA-MW-14S
7/5/2016	3.86	
8/23/2016	4.69	
9/7/2016	4.6	
11/8/2016	4.68	
1/3/2017	5.25	
2/21/2017	4.3	
5/31/2017	4.2	
7/5/2017	3.4	
9/5/2017	4.5	
6/12/2018		3.6
10/23/2018		3.4

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-15	GN-GSA-MW-15
7/6/2016	3.78	
8/23/2016	3.47	
9/7/2016	3.4	
11/8/2016	3.29	
1/3/2017	3.11	
2/20/2017	2.7	
5/31/2017	2.3	
7/5/2017	2	
9/5/2017	<2 (U*)	
6/12/2018		2
10/23/2018		<2 (J)

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

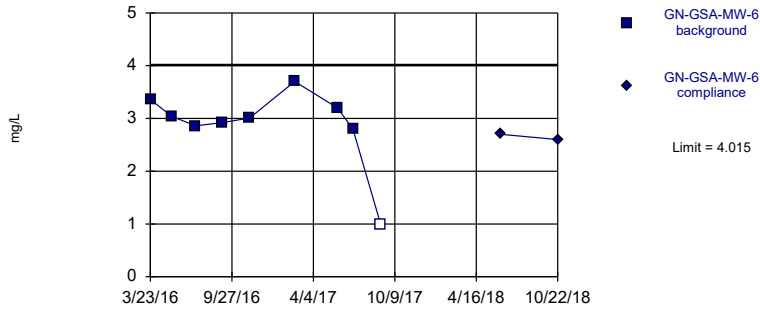
	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	3.35	
5/10/2016	3.06	
7/5/2016	2.9	
9/6/2016	2.54	
11/8/2016	2.34	
2/22/2017	2.9	
5/31/2017	2.7	
7/5/2017	2.2	
9/7/2017	<2 (U*)	
6/12/2018		2.4
10/23/2018		2.1

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	4.84	
5/11/2016	4.19	
7/6/2016	4.67	
9/6/2016	4.23	
11/8/2016	4.51	
2/20/2017	5.8	
5/30/2017	13	
7/5/2017	17	
9/7/2017	17	
6/11/2018		14
10/22/2018		14

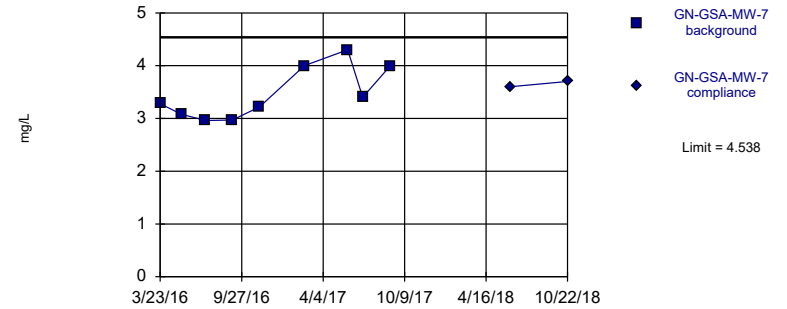
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (based on square transformation): Mean=8.785, Std. Dev.=3.44, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8682, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

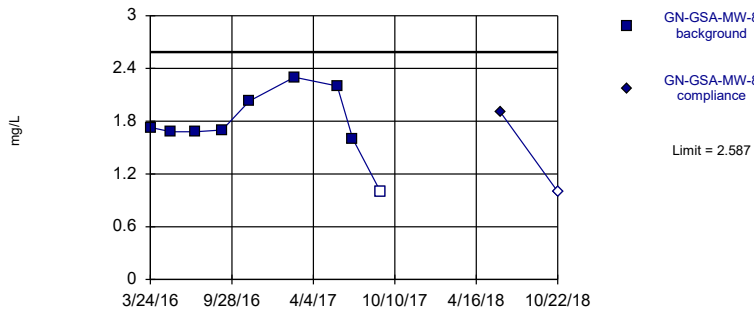
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=3.468, Std. Dev.=0.502, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8667, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

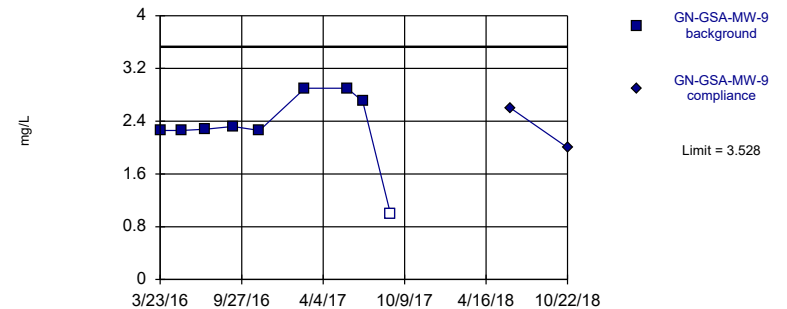
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=1.769, Std. Dev.=0.3837, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9076, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.32, Std. Dev.=0.567, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7828, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	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

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	3.28	
5/11/2016	3.08	
7/6/2016	2.96	
9/6/2016	2.97	
11/8/2016	3.22	
2/20/2017	4	
5/31/2017	4.3	
7/5/2017	3.4	
9/7/2017	4	
6/11/2018		3.6
10/22/2018		3.7

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	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

Prediction Limit

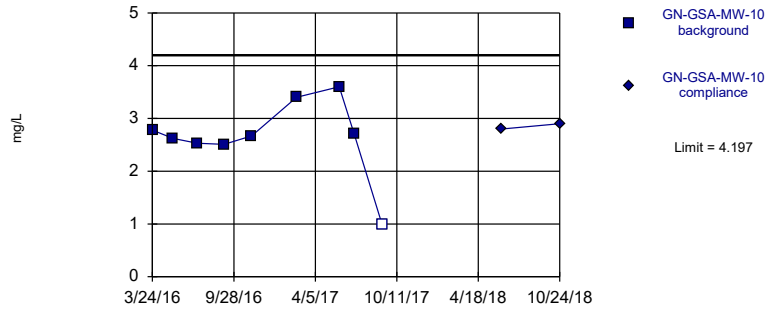
Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	2.26	
5/11/2016	2.26	
7/6/2016	2.28	
9/7/2016	2.32	
11/8/2016	2.26	
2/21/2017	2.9	
5/30/2017	2.9	
7/5/2017	2.7	
9/7/2017	<2 (U*)	
6/12/2018		2.6
10/22/2018		2

Within Limit

Prediction Limit Intrawell Parametric

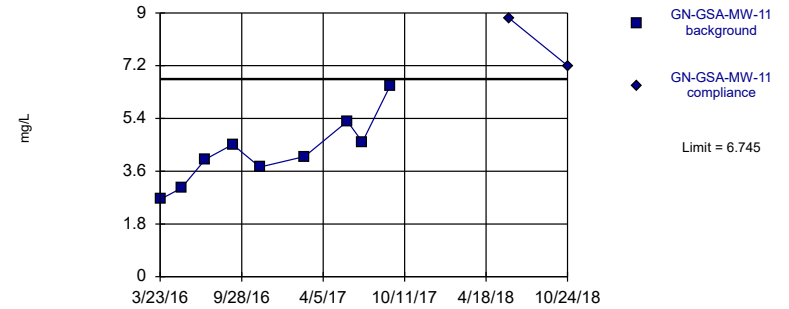


Background Data Summary: Mean=2.646, Std. Dev.=0.7282, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8302, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit Intrawell Parametric

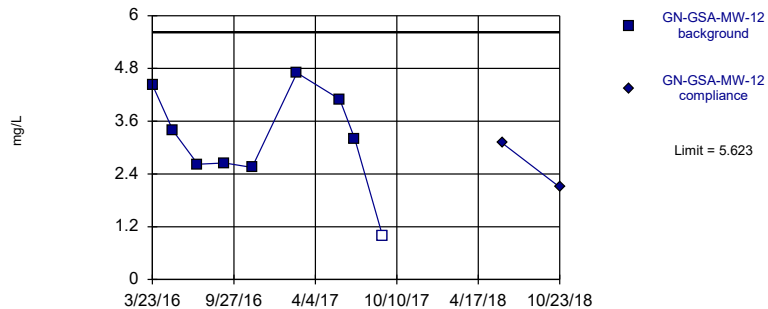


Background Data Summary: Mean=4.269, Std. Dev.=1.162, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9661, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit Intrawell Parametric

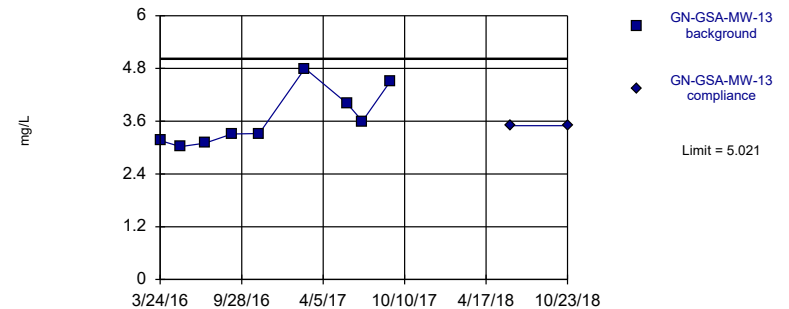


Background Data Summary: Mean=3.181, Std. Dev.=1.146, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9447, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit Intrawell Parametric



Background Data Summary: Mean=3.646, Std. Dev.=0.6455, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8625, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-10
3/24/2016	2.78	
5/11/2016	2.62	
7/6/2016	2.53	
9/6/2016	2.51	
11/9/2016	2.67	
2/21/2017	3.4	
5/31/2017	3.6	
7/5/2017	2.7	
9/7/2017	<2 (U*)	
6/12/2018		2.8
10/24/2018		2.9

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-11
3/23/2016	2.64	
5/11/2016	3.02	
7/6/2016	4.01	
9/7/2016	4.51	
11/9/2016	3.74	
2/21/2017	4.1	
5/31/2017	5.3	
7/5/2017	4.6	
9/7/2017	6.5	
6/12/2018		8.8
10/24/2018		7.2

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell

Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-12
3/23/2016	4.43	
5/10/2016	3.38	
7/6/2016	2.62	
9/6/2016	2.65	
11/9/2016	2.55	
2/21/2017	4.7	
5/31/2017	4.1	
7/5/2017	3.2	
9/7/2017	<2 (U*)	
6/12/2018		3.1
10/23/2018		2.1

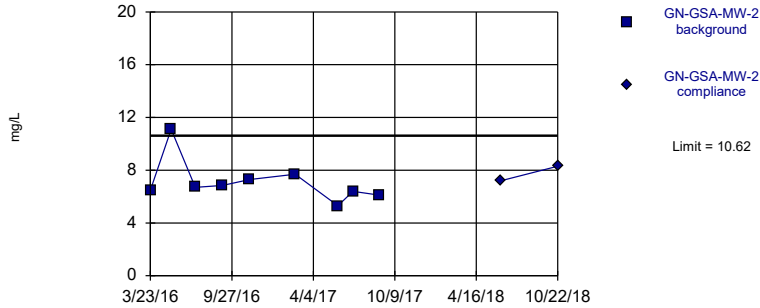
Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-13	GN-GSA-MW-13
3/24/2016	3.16	
5/10/2016	3.02	
7/6/2016	3.1	
9/6/2016	3.31	
11/8/2016	3.32	
2/22/2017	4.8	
5/31/2017	4	
7/5/2017	3.6	
9/7/2017	4.5	
6/12/2018		3.5
10/23/2018		3.5

Within Limit

Prediction Limit
Intrawell Parametric



Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2	GN-GSA-MW-2
3/23/2016	6.48	
5/10/2016	11.1	
7/5/2016	6.7	
9/6/2016	6.85	
11/8/2016	7.3	
2/21/2017	7.7	
5/31/2017	5.3	
7/5/2017	6.4	
9/5/2017	6.1	
6/12/2018		7.2
10/22/2018		8.3

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-3	GN-GSA-MW-3
3/23/2016	32.6	
5/10/2016	27.6	
7/6/2016	23.6	
9/7/2016	22.2	
11/8/2016	20.4	
2/20/2017	14	
5/31/2017	15	
7/5/2017	11	
9/5/2017	17	
6/12/2018		14
10/23/2018		12

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-14S	GN-GSA-MW-14S
7/5/2016	11.7	
8/23/2016	13.7	
9/7/2016	12.4	
11/8/2016	12.9	
1/3/2017	14.1	
2/21/2017	6.1	
5/31/2017	8	
7/5/2017	3.8 (J)	
9/5/2017	6.8	
6/12/2018		5
10/23/2018		5.4

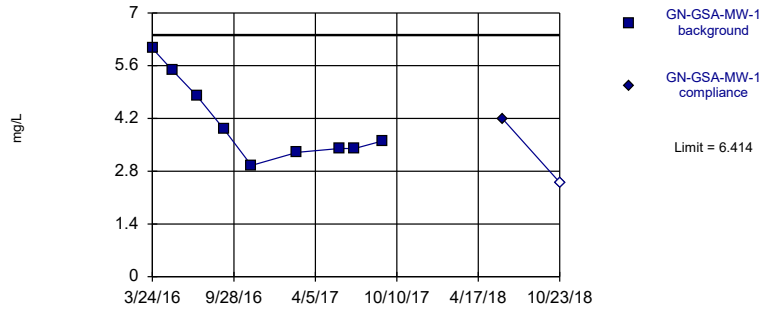
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-15	GN-GSA-MW-15
7/6/2016	5.38	
8/23/2016	4.23	
9/7/2016	3.84	
11/8/2016	3.23	
1/3/2017	3	
2/20/2017	3.1 (J)	
5/31/2017	2.1 (J)	
7/5/2017	2 (J)	
9/5/2017	2.2 (J)	
6/12/2018		2.3 (J)
10/23/2018		<5

Within Limit

Prediction Limit
Intrawell Parametric

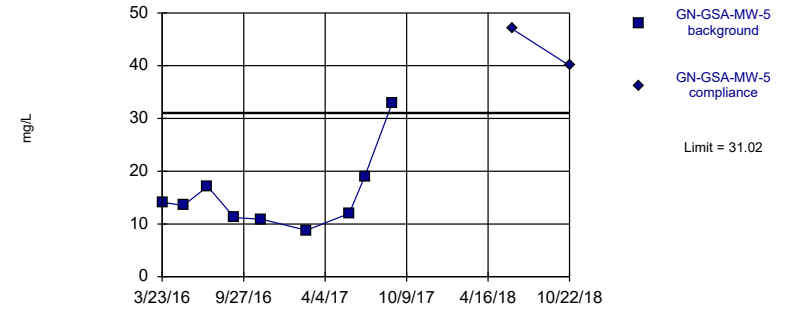


Background Data Summary: Mean=4.099, Std. Dev.=1.086, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8668, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit
Intrawell Parametric

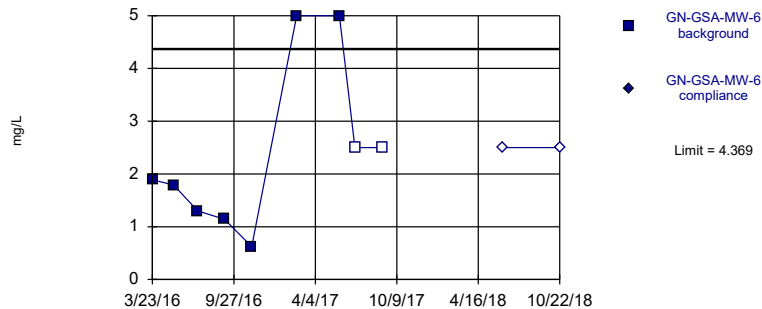


Background Data Summary: Mean=15.51, Std. Dev.=7.278, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7851, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

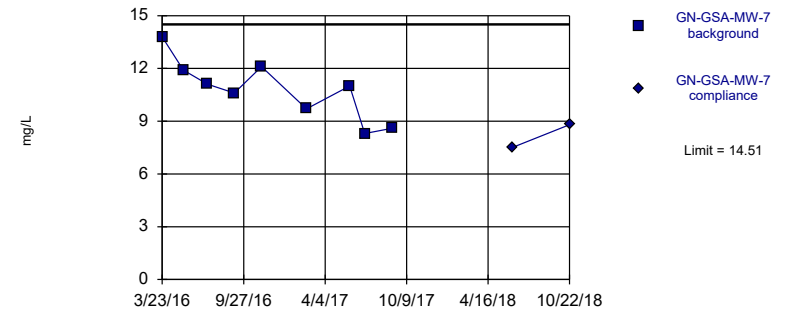


Background Data Summary (after Kaplan-Meier Adjustment): Mean=1.754, Std. Dev.=1.227, n=9, 22.22% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7711, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=10.79, Std. Dev.=1.745, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	6.06	
5/10/2016	5.47	
7/5/2016	4.8	
9/6/2016	3.91	
11/8/2016	2.95	
2/22/2017	3.3 (J)	
5/31/2017	3.4 (J)	
7/5/2017	3.4 (J)	
9/7/2017	3.6 (J)	
6/12/2018		4.2 (J)
10/23/2018		<5 (J)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	14.1	
5/11/2016	13.5	
7/6/2016	17.1	
9/6/2016	11.2	
11/8/2016	10.9	
2/20/2017	8.8	
5/30/2017	12	
7/5/2017	19	
9/7/2017	33	
6/11/2018		47
10/22/2018		40

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-6	GN-GSA-MW-6
3/23/2016	1.89	
5/11/2016	1.79	
7/6/2016	1.3	
9/6/2016	1.14	
11/8/2016	0.622 (J)	
2/20/2017	5	
5/30/2017	5	
7/5/2017	<5	
9/7/2017	<5	
6/11/2018		<5
10/22/2018		<5

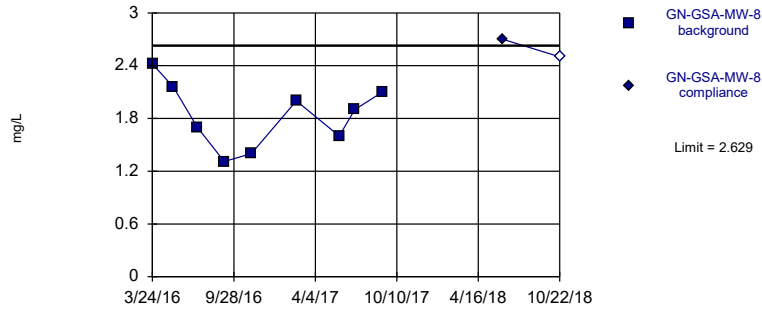
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	13.8	
5/11/2016	11.9	
7/6/2016	11.1	
9/6/2016	10.6	
11/8/2016	12.1	
2/20/2017	9.7	
5/31/2017	11	
7/5/2017	8.3	
9/7/2017	8.6	
6/11/2018		7.5
10/22/2018		8.8

Within Limit

Prediction Limit
Intrawell Parametric

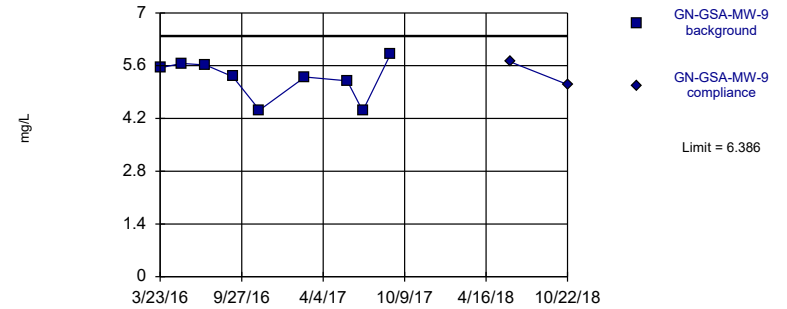


Background Data Summary: Mean=1.843, Std. Dev.=0.3686, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9707, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

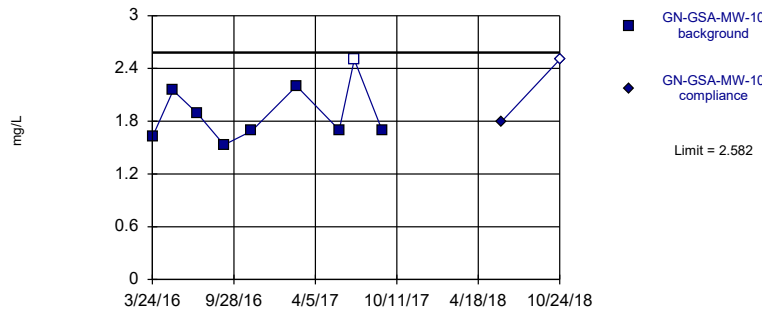


Background Data Summary: Mean=5.261, Std. Dev.=0.528, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8677, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

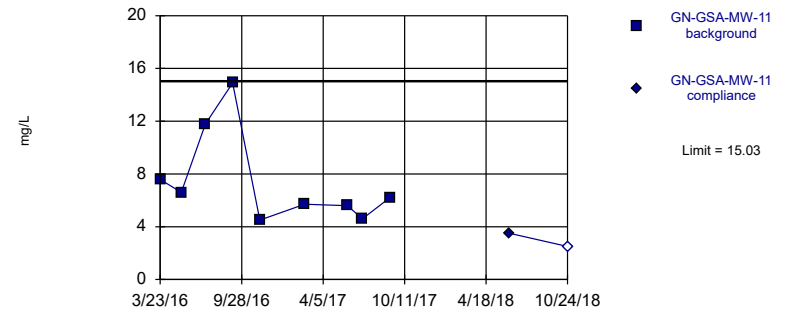


Background Data Summary: Mean=1.887, Std. Dev.=0.326, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8863, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.499, Std. Dev.=3.536, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7987, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-8
3/24/2016	2.42	
5/11/2016	2.16	
7/6/2016	1.7	
9/6/2016	1.31	
11/8/2016	1.4	
2/20/2017	2 (J)	
5/30/2017	1.6 (J)	
7/5/2017	1.9 (J)	
9/7/2017	2.1 (J)	
6/12/2018		2.7 (J)
10/22/2018		<5 (J)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	5.54	
5/11/2016	5.66	
7/6/2016	5.62	
9/7/2016	5.31	
11/8/2016	4.42	
2/21/2017	5.3	
5/30/2017	5.2	
7/5/2017	4.4 (J)	
9/7/2017	5.9	
6/12/2018		5.7
10/22/2018		5.1

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

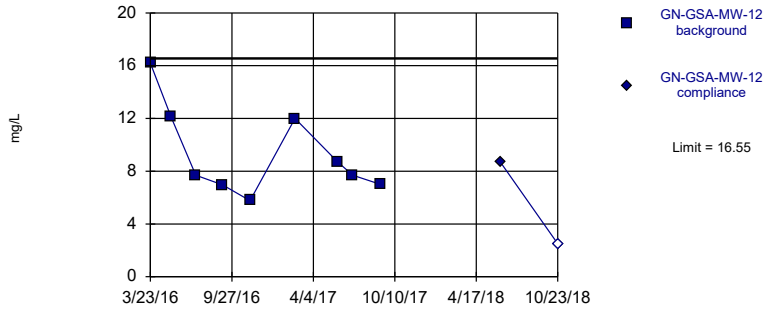
	GN-GSA-MW-10	GN-GSA-MW-10
3/24/2016	1.62	
5/11/2016	2.15	
7/6/2016	1.89	
9/6/2016	1.53	
11/9/2016	1.69	
2/21/2017	2.2 (J)	
5/31/2017	1.7 (J)	
7/5/2017	<5	
9/7/2017	1.7 (J)	
6/12/2018		1.8 (J)
10/24/2018		<5

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-11
3/23/2016	7.59	
5/11/2016	6.6	
7/6/2016	11.8	
9/7/2016	14.9	
11/9/2016	4.5	
2/21/2017	5.7	
5/31/2017	5.6	
7/5/2017	4.6 (J)	
9/7/2017	6.2	
6/12/2018		3.5 (J)
10/24/2018		<5 (J)

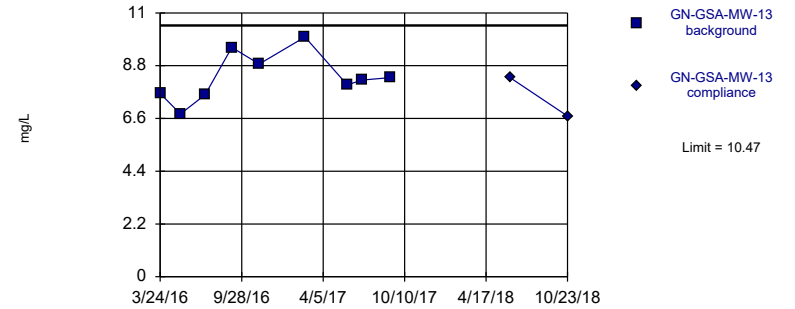
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=9.349, Std. Dev.=3.38, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8645, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:40 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

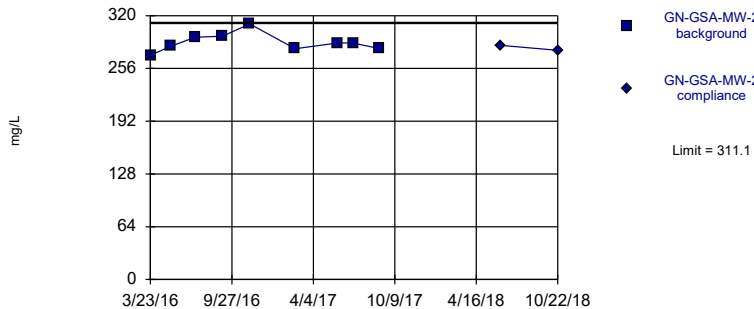
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=8.328, Std. Dev.=1.007, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9665, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

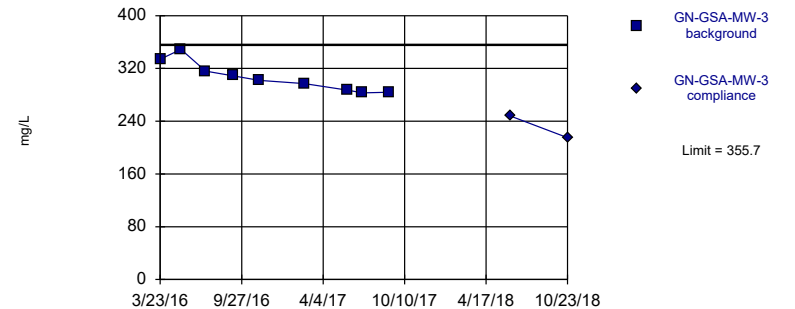
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=287.6, Std. Dev.=11.06, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9438, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=306.8, Std. Dev.=22.93, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9121, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-12
3/23/2016	16.2	
5/10/2016	12.1	
7/6/2016	7.7	
9/6/2016	6.97	
11/9/2016	5.77	
2/21/2017	12	
5/31/2017	8.7	
7/5/2017	7.7	
9/7/2017	7	
6/12/2018		8.7
10/23/2018		<5 (J)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-13	GN-GSA-MW-13
3/24/2016	7.64	
5/10/2016	6.79	
7/6/2016	7.59	
9/6/2016	9.56	
11/8/2016	8.87	
2/22/2017	10	
5/31/2017	8	
7/5/2017	8.2	
9/7/2017	8.3	
6/12/2018		8.3
10/23/2018		6.7

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-2	GN-GSA-MW-2
3/23/2016	272	
5/10/2016	283	
7/5/2016	294	
9/6/2016	295	
11/8/2016	310	
2/21/2017	280	
5/31/2017	287	
7/5/2017	287	
9/5/2017	280	
6/12/2018		284
10/22/2018		278

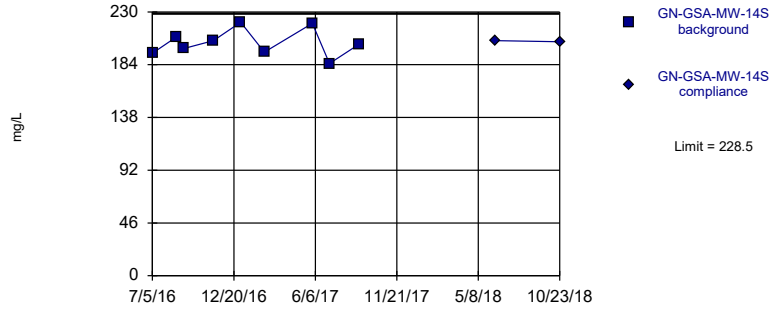
Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-3	GN-GSA-MW-3
3/23/2016	334	
5/10/2016	349	
7/6/2016	316	
9/7/2016	309	
11/8/2016	302	
2/20/2017	297	
5/31/2017	287	
7/5/2017	283	
9/5/2017	284	
6/12/2018		248
10/23/2018		215

Within Limit

Prediction Limit
Intrawell Parametric

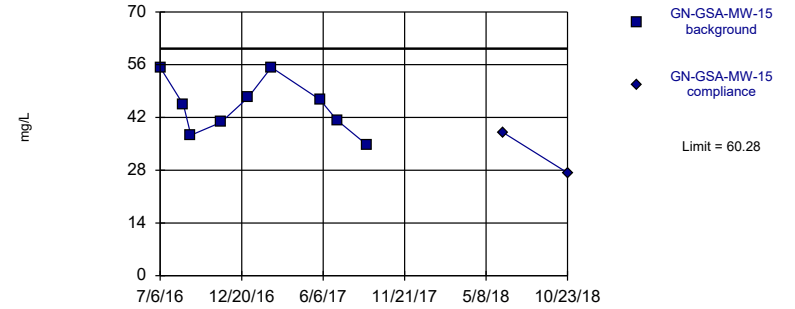


Background Data Summary: Mean=203.1, Std. Dev.=11.92, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9499, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

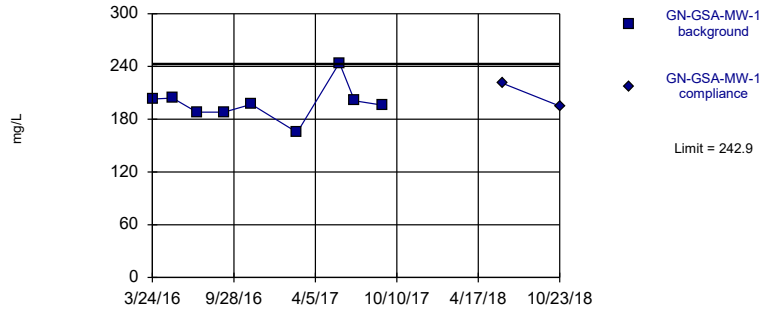


Background Data Summary: Mean=44.88, Std. Dev.=7.227, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9367, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
Intrawell Parametric

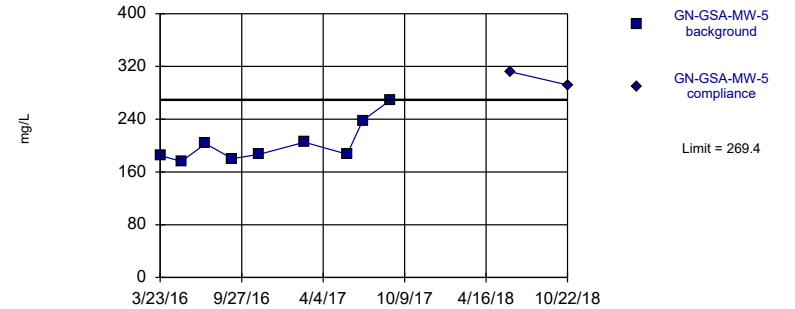


Background Data Summary: Mean=198.4, Std. Dev.=20.85, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8742, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Exceeds Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=203.3, Std. Dev.=30.98, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8137, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-14S	GN-GSA-MW-14S
7/5/2016	194	
8/23/2016	208	
9/7/2016	198	
11/8/2016	205	
1/3/2017	221	
2/21/2017	195	
5/31/2017	220	
7/5/2017	185	
9/5/2017	202	
6/12/2018		205
10/23/2018		204

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-15	GN-GSA-MW-15
7/6/2016	55.3	
8/23/2016	45.3	
9/7/2016	37.3	
11/8/2016	40.7	
1/3/2017	47.3	
2/20/2017	55.3	
5/31/2017	46.7	
7/5/2017	41.3	
9/5/2017	34.7	
6/12/2018		38
10/23/2018		27.3

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-1	GN-GSA-MW-1
3/24/2016	203	
5/10/2016	204	
7/5/2016	188	
9/6/2016	188	
11/8/2016	197	
2/22/2017	165	
5/31/2017	244	
7/5/2017	201	
9/7/2017	196	
6/12/2018		221
10/23/2018		195

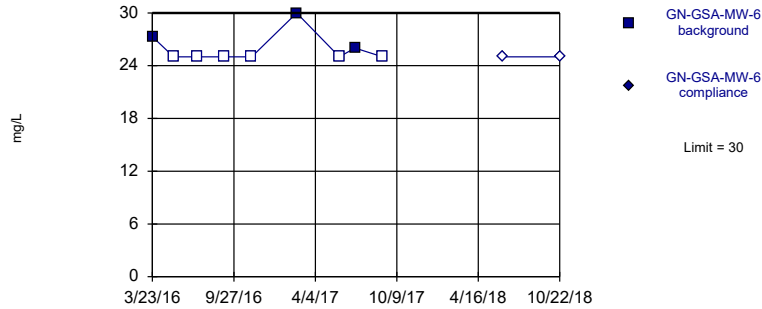
Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-5	GN-GSA-MW-5
3/23/2016	185	
5/11/2016	176	
7/6/2016	203	
9/6/2016	180	
11/8/2016	187	
2/20/2017	205	
5/30/2017	187	
7/5/2017	238	
9/7/2017	269	
6/11/2018		312
10/22/2018		292

Within Limit

Prediction Limit
 Intrawell Non-parametric

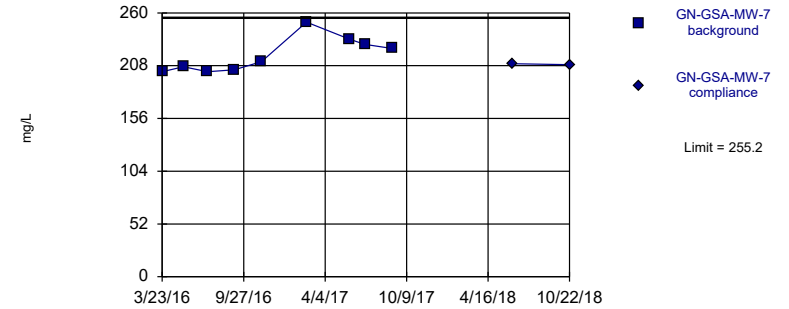


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
 Intrawell Parametric

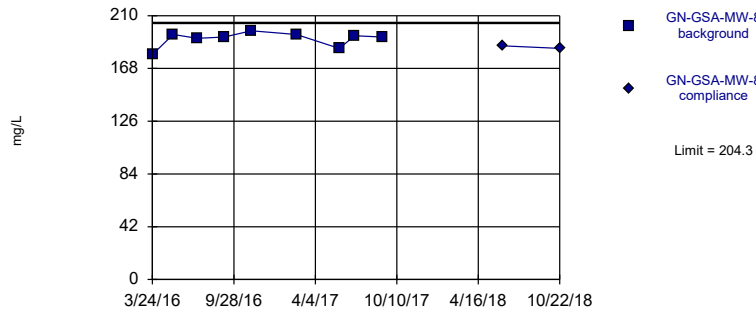


Background Data Summary: Mean=218.4, Std. Dev.=17.24, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.885, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
 Intrawell Parametric

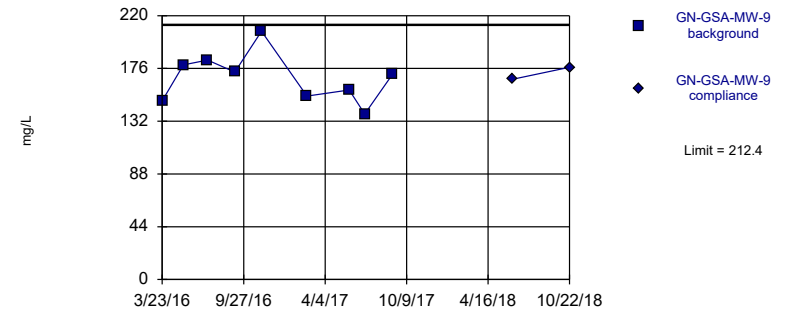


Background Data Summary: Mean=191.4, Std. Dev.=6.023, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8217, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Within Limit

Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=167.9, Std. Dev.=20.88, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9719, critical = 0.764. Kappa = 2.131 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: TDS Analysis Run 12/18/2018 1:41 PM View: PLs - Intrawell
 Plant Gaston Client: Southern Company Data: Gaston GSA

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-6	GN-GSA-MW-6
3/23/2016	27.3	
5/11/2016	<25	
7/6/2016	<25	
9/6/2016	<25	
11/8/2016	<25	
2/20/2017	30	
5/30/2017	<25	
7/5/2017	26	
9/7/2017	<25	
6/11/2018		<25
10/22/2018		<25

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-7	GN-GSA-MW-7
3/23/2016	202	
5/11/2016	207	
7/6/2016	202	
9/6/2016	204	
11/8/2016	212	
2/20/2017	251	
5/31/2017	234	
7/5/2017	229	
9/7/2017	225	
6/11/2018		210
10/22/2018		209

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-8	GN-GSA-MW-8
3/24/2016	179	
5/11/2016	195	
7/6/2016	192	
9/6/2016	193	
11/8/2016	198	
2/20/2017	195	
5/30/2017	184	
7/5/2017	194	
9/7/2017	193	
6/12/2018		186
10/22/2018		184

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-9	GN-GSA-MW-9
3/23/2016	149	
5/11/2016	179	
7/6/2016	183	
9/7/2016	173	
11/8/2016	207	
2/21/2017	153	
5/30/2017	158	
7/5/2017	138	
9/7/2017	171	
6/12/2018		167
10/22/2018		177

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-10	GN-GSA-MW-10
3/24/2016	239	
5/11/2016	257	
7/6/2016	256	
9/6/2016	245	
11/9/2016	258	
2/21/2017	243	
5/31/2017	252	
7/5/2017	257	
9/7/2017	259	
6/12/2018		266
10/24/2018		265

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-11	GN-GSA-MW-11
3/23/2016	56.7	
5/11/2016	54.7	
7/6/2016	76	
9/7/2016	96	
11/9/2016	57.3	
2/21/2017	76.7	
5/31/2017	75.3	
7/5/2017	80	
9/7/2017	105	
6/12/2018		72
10/24/2018		68

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-12	GN-GSA-MW-12
3/23/2016	237	
5/10/2016	226	
7/6/2016	191	
9/6/2016	200	
11/9/2016	190	
2/21/2017	264	
5/31/2017	242	
7/5/2017	231	
9/7/2017	225	
6/12/2018		230
10/23/2018		201

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/18/2018 2:05 PM View: PLs - IntraWell
Plant Gaston Client: Southern Company Data: Gaston GSA

	GN-GSA-MW-13	GN-GSA-MW-13
3/24/2016	244	
5/10/2016	247	
7/6/2016	247	
9/6/2016	264	
11/8/2016	173	
2/22/2017	260	
5/31/2017	277	
7/5/2017	296	
9/7/2017	294	
6/12/2018		282
10/23/2018		279

Trend Test Summary Table - Significant Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:15 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GN-GSA-MW-3 (bg)	-14.02	-45	-34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-13	10.24	45	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-15 (bg)	-1.52	-51	-34	Yes	11	18.18	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-11	1.99	45	34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-3 (bg)	-8.111	-42	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-1.627	-35	-34	Yes	11	9.091	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-3 (bg)	-39.69	-51	-34	Yes	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-5	53.75	40	34	Yes	11	0	n/a	n/a	0.01	NP

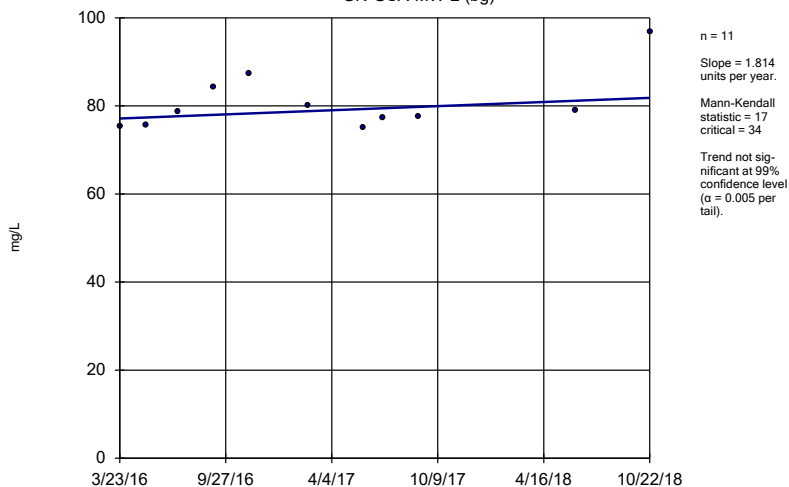
Trend Test Summary Table - All Results

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 12/18/2018, 2:15 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	GN-GSA-MW-2 (bg)	1.814	17	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-3 (bg)	-14.02	-45	-34	Yes	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-14S (bg)	-3.221	-33	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-15 (bg)	-1.279	-25	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-1	0.944	10	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-10	4.742	31	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-GSA-MW-13	10.24	45	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-2 (bg)	0.1382	9	34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-3 (bg)	-0.2147	-24	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-14S (bg)	-0.5489	-24	-34	No	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-15 (bg)	-1.52	-51	-34	Yes	11	18.18	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-GSA-MW-11	1.99	45	34	Yes	11	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-2 (bg)	0.01133	25	38	No	12	41.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-3 (bg)	-0.00848	-15	-38	No	12	16.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-14S (bg)	-0.008334	-21	-38	No	12	25	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-15 (bg)	1.5e-9	24	38	No	12	58.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-1	0.02215	15	38	No	12	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-GSA-MW-8	-0.006981	-18	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-2 (bg)	-0.01811	-15	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-3 (bg)	-0.03383	-9	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-14S (bg)	0.01334	8	38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-15 (bg)	-0.02105	-12	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-1	-0.01358	-11	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH)	GN-GSA-MW-6	-0.05604	-14	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-2 (bg)	0.1984	1	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-3 (bg)	-8.111	-42	-34	Yes	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-14S (bg)	-4.189	-27	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-15 (bg)	-1.627	-35	-34	Yes	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-GSA-MW-5	10.82	21	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-2 (bg)	-2.039	-7	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-3 (bg)	-39.69	-51	-34	Yes	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-14S (bg)	1.58	2	34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-15 (bg)	-8.306	-24	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-GSA-MW-5	53.75	40	34	Yes	11	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

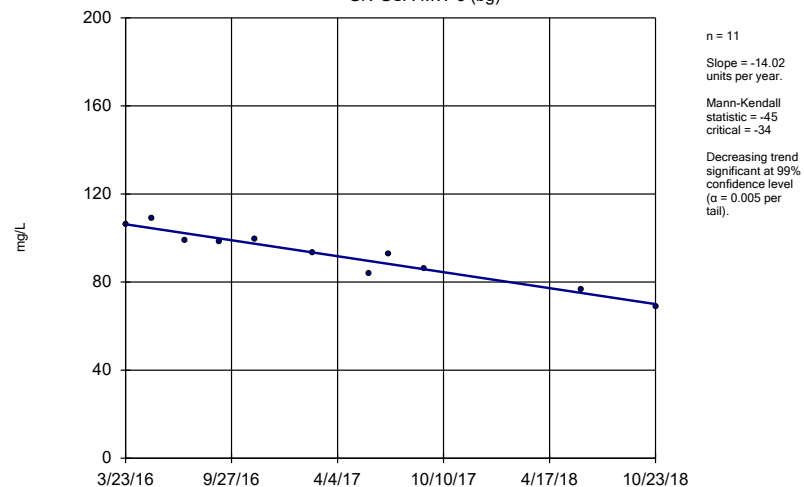
GN-GSA-MW-2 (bg)



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

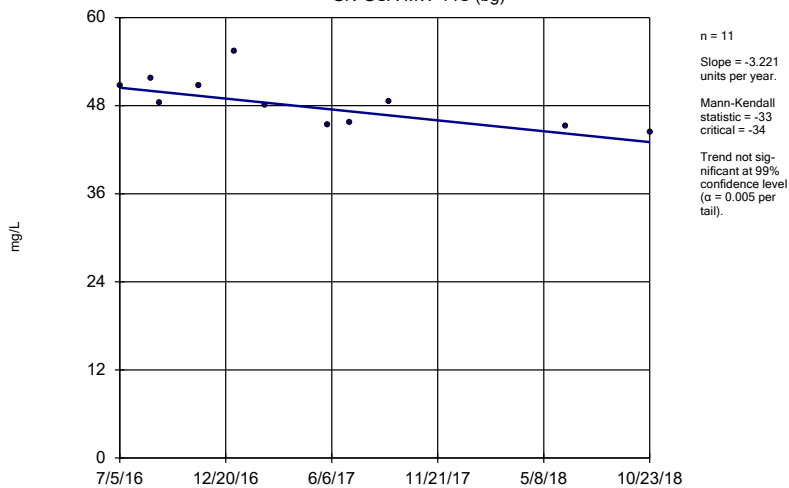
GN-GSA-MW-3 (bg)



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

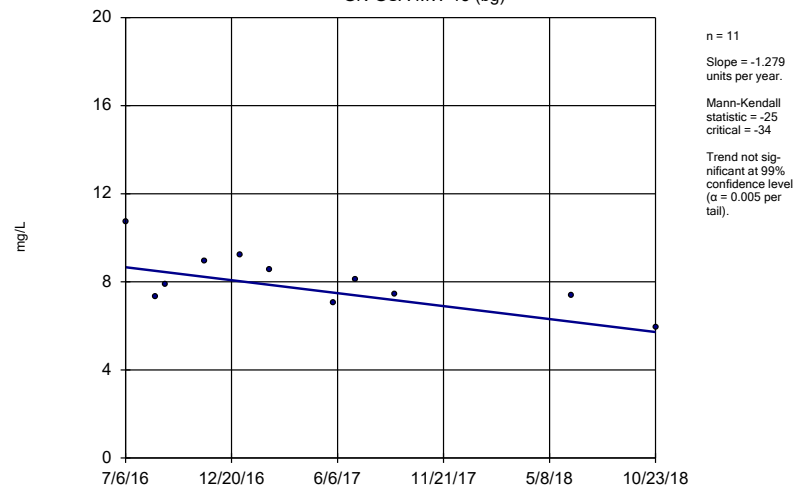
GN-GSA-MW-14S (bg)



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

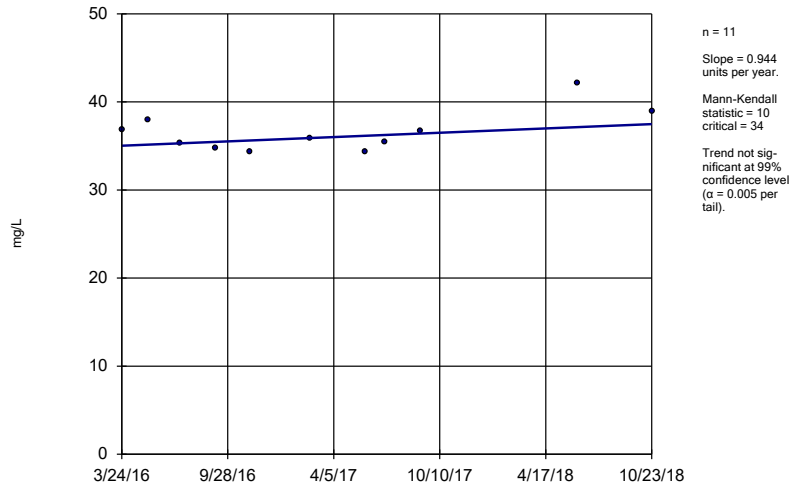
GN-GSA-MW-15 (bg)



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

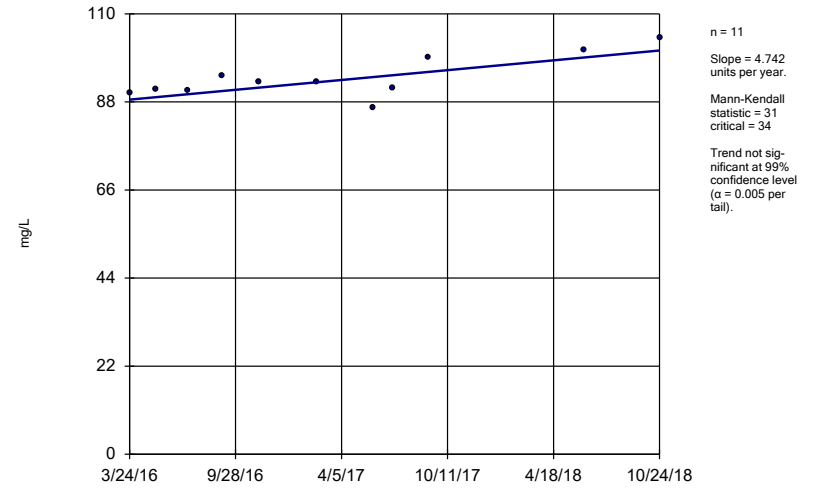
GN-GSA-MW-1



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

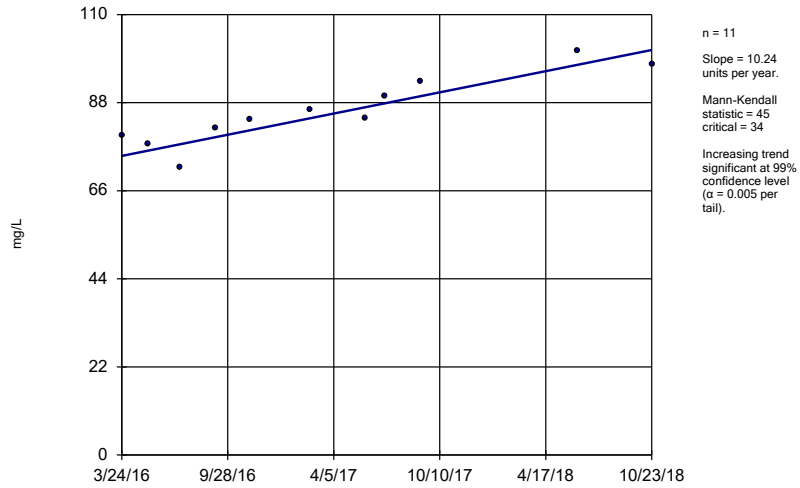
GN-GSA-MW-10



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

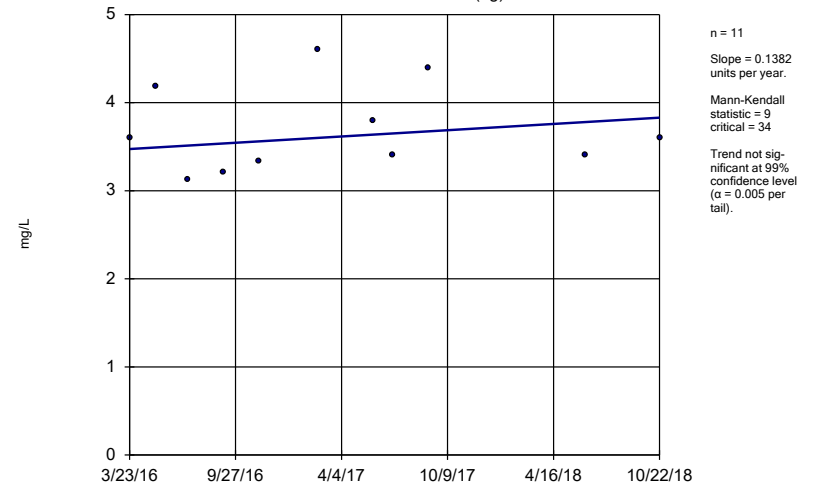
GN-GSA-MW-13



Constituent: Calcium Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

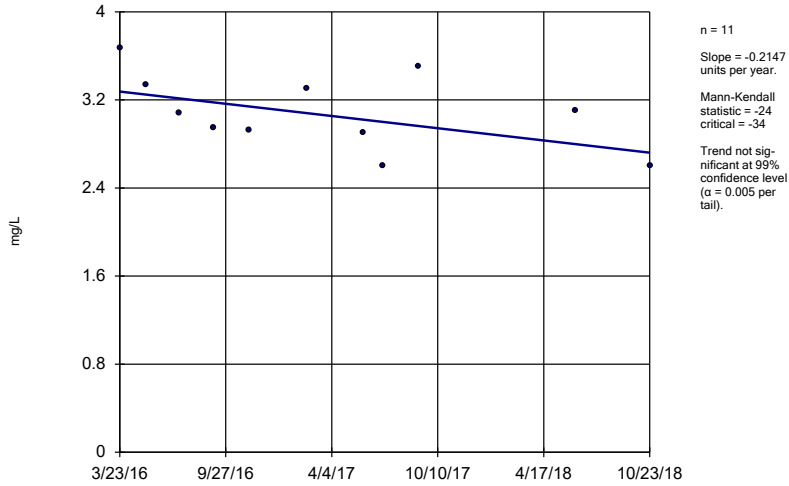
Sen's Slope Estimator

GN-GSA-MW-2 (bg)



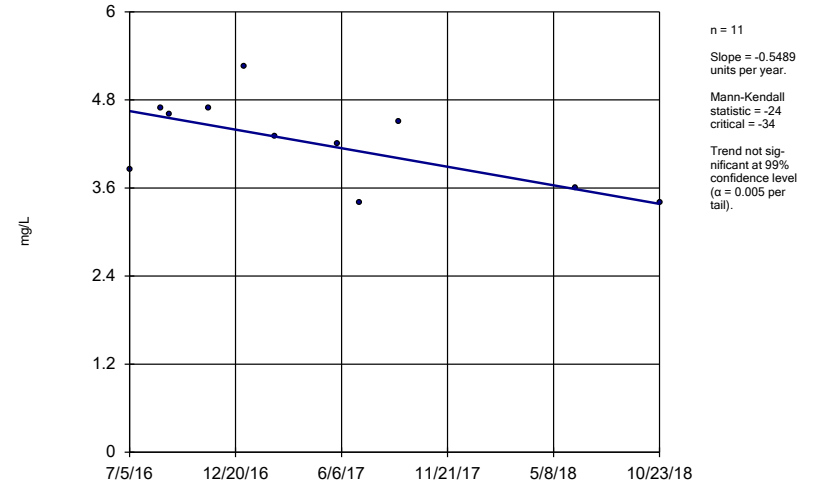
Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator
GN-GSA-MW-3 (bg)



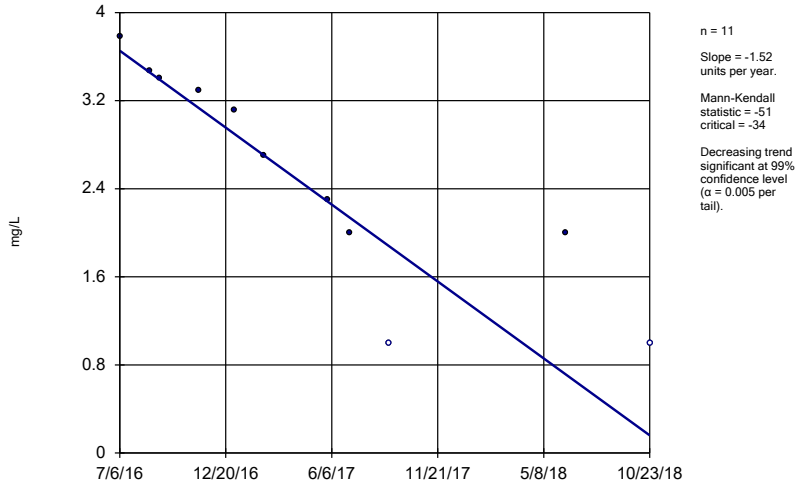
Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator
GN-GSA-MW-14S (bg)



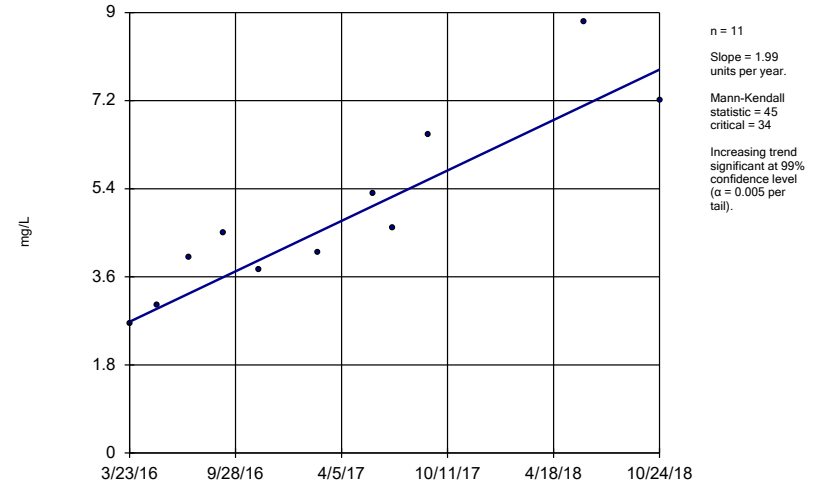
Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator
GN-GSA-MW-15 (bg)



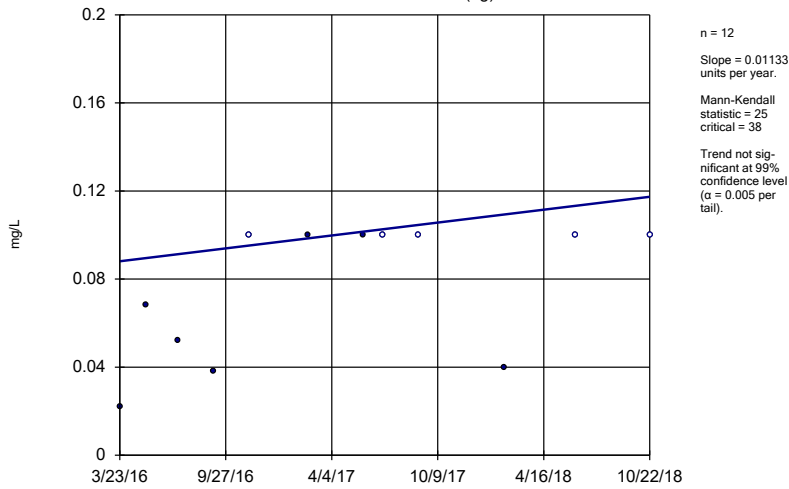
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Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator
GN-GSA-MW-11



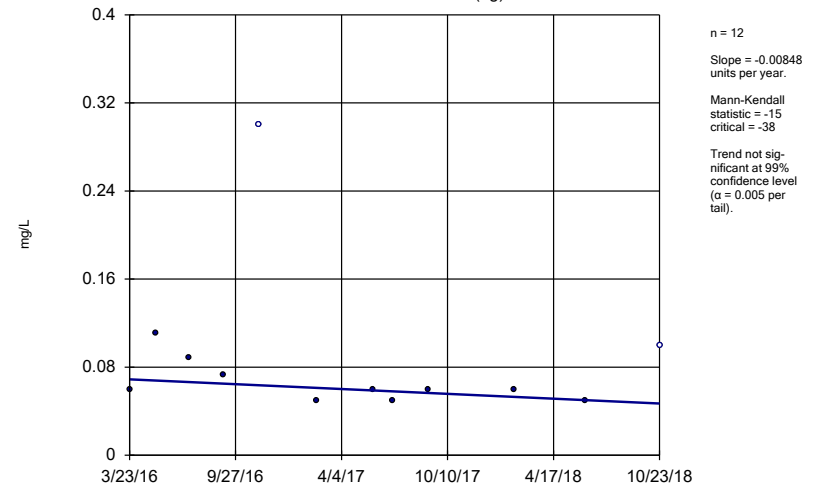
Constituent: Chloride Analysis Run 12/18/2018 2:13 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-2 (bg)



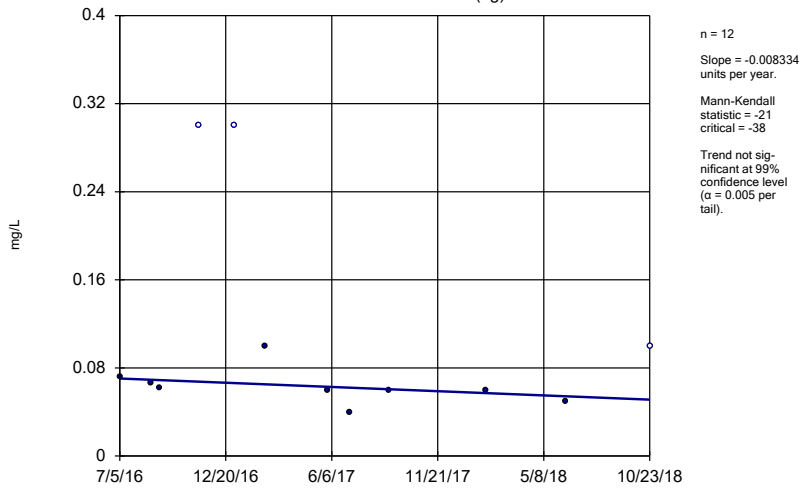
Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-3 (bg)



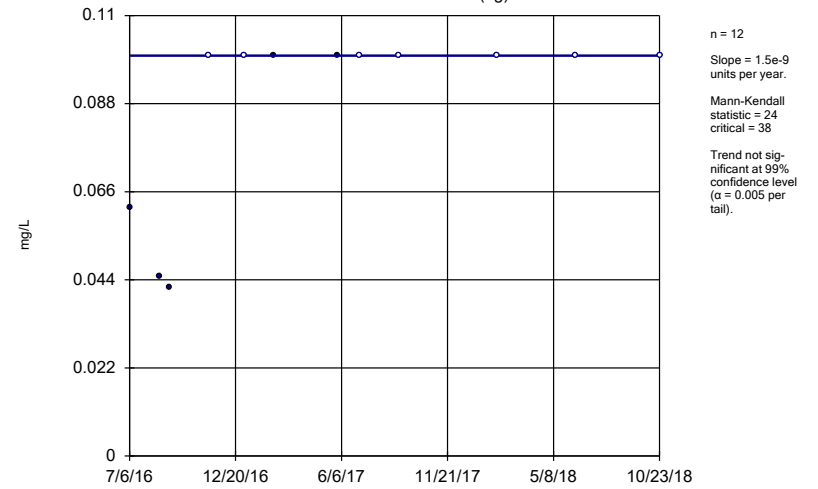
Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-14S (bg)



Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

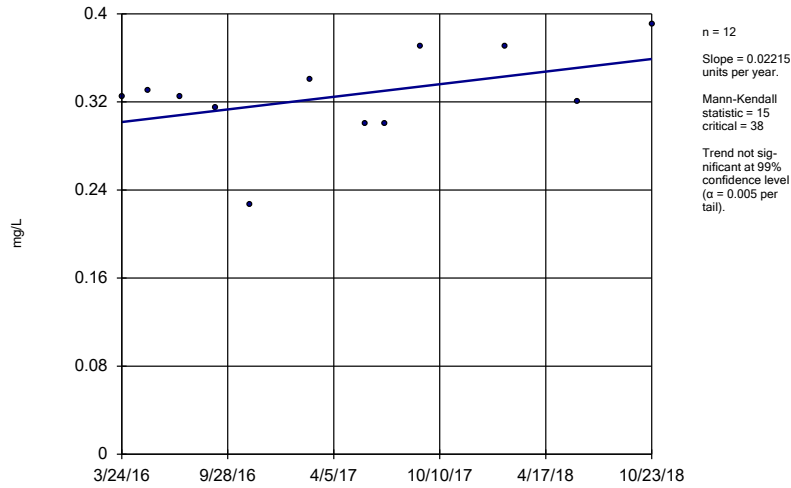
Sen's Slope Estimator GN-GSA-MW-15 (bg)



Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

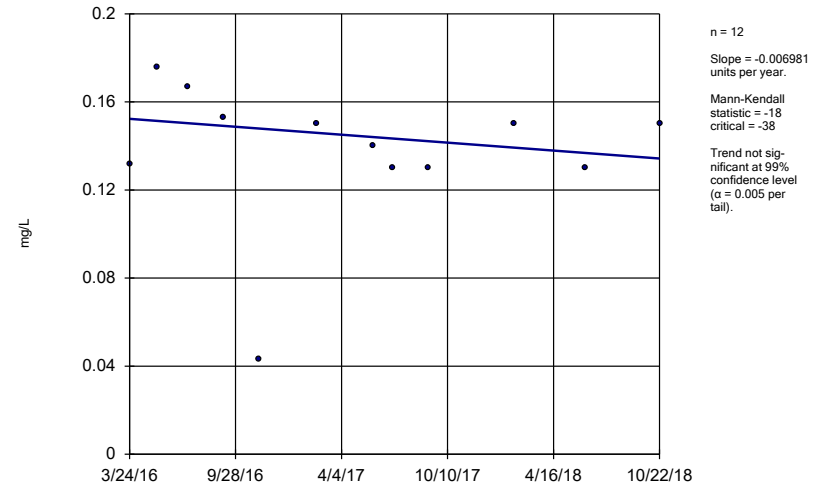
GN-GSA-MW-1



Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

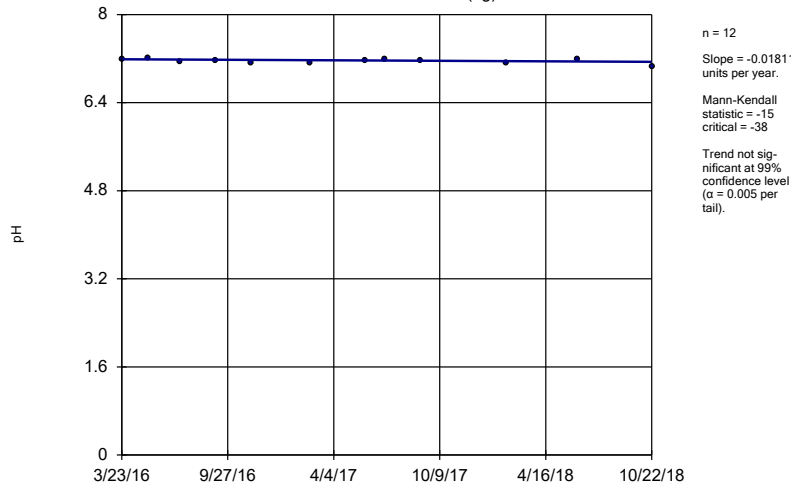
GN-GSA-MW-8



Constituent: Fluoride Analysis Run 12/18/2018 2:14 PM View: Trend Tests
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

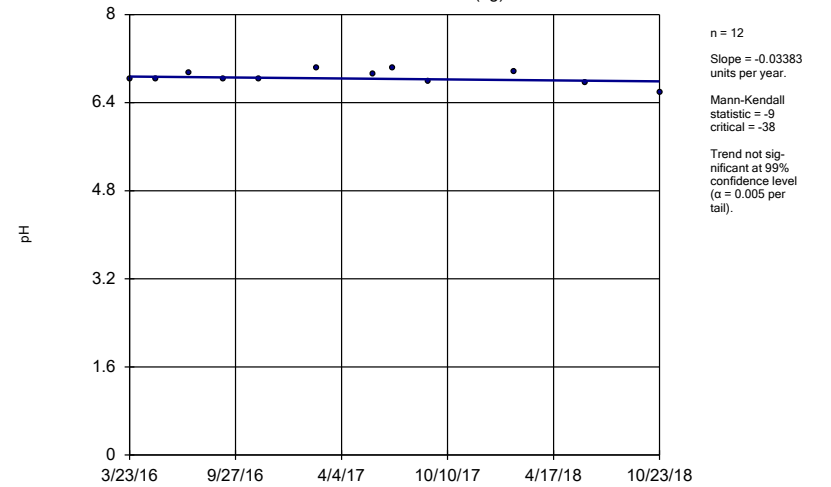
GN-GSA-MW-2 (bg)



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

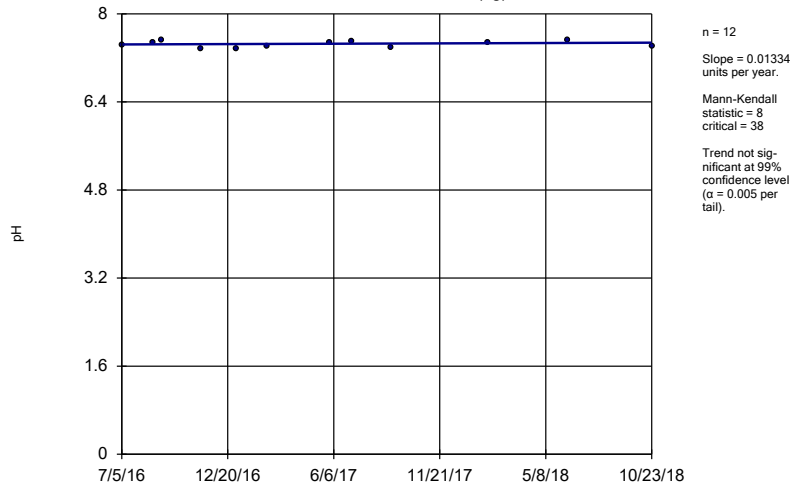
GN-GSA-MW-3 (bg)



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
 Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

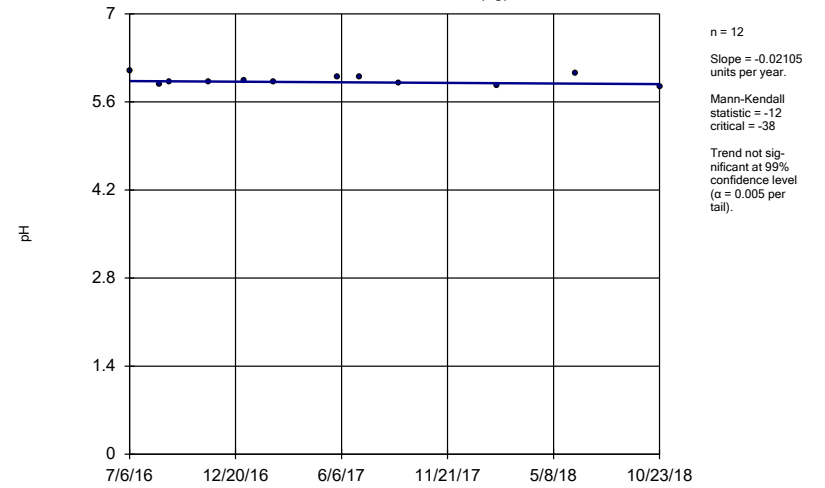
GN-GSA-MW-14S (bg)



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

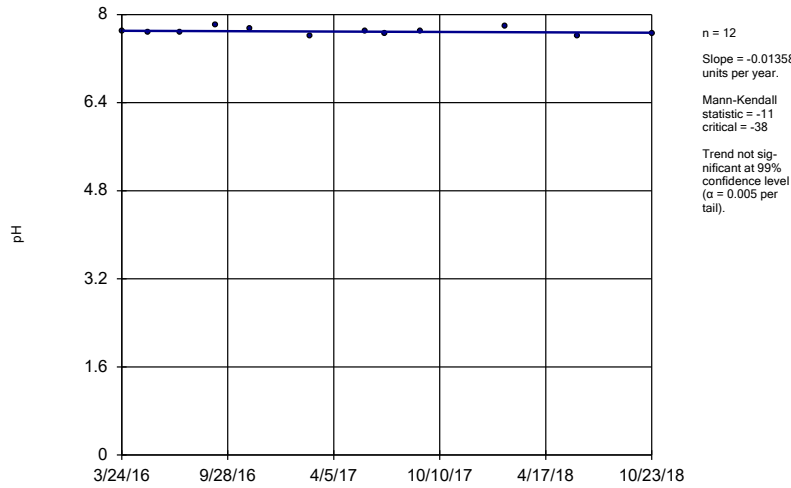
GN-GSA-MW-15 (bg)



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

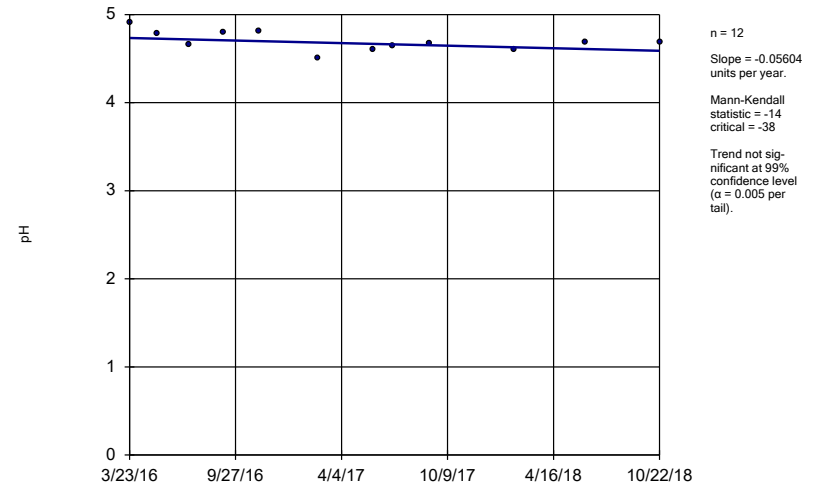
GN-GSA-MW-1



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

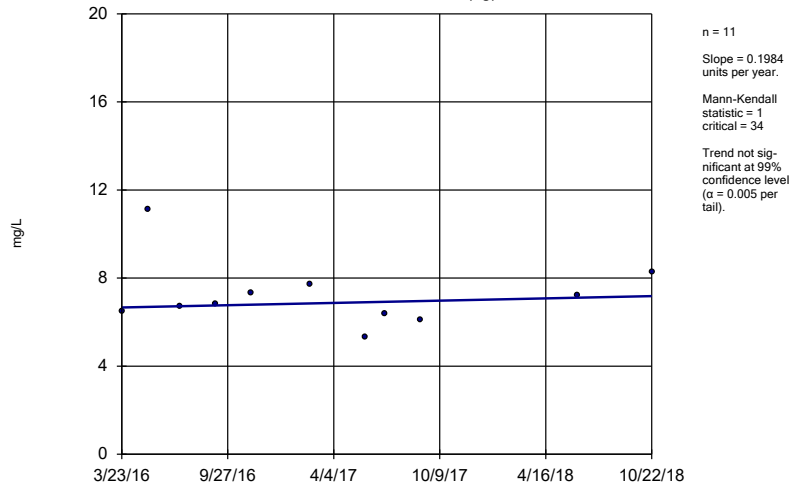
GN-GSA-MW-6



Constituent: pH Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

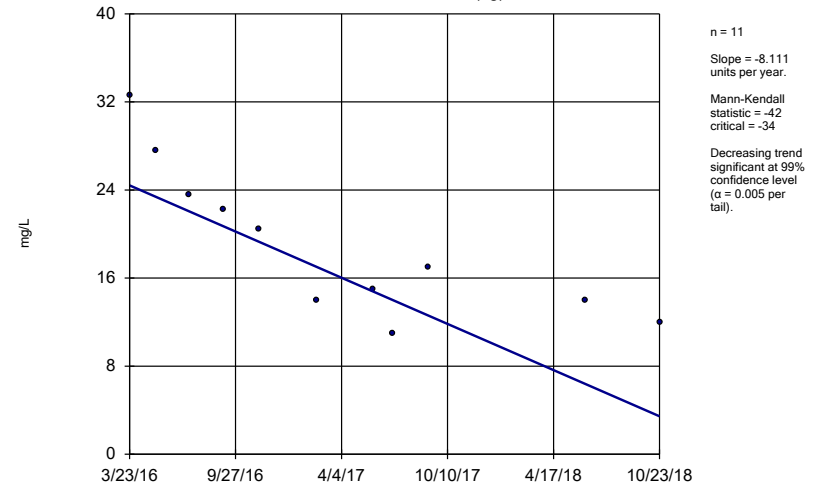
GN-GSA-MW-2 (bg)



Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

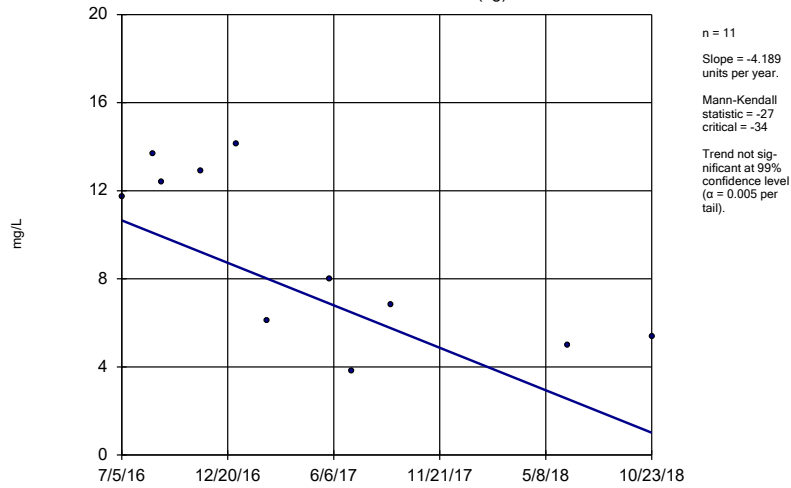
GN-GSA-MW-3 (bg)



Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator

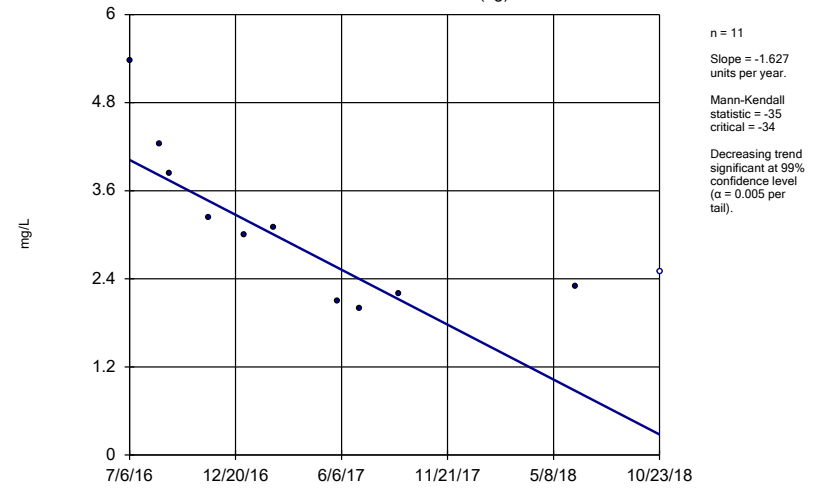
GN-GSA-MW-14S (bg)



Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

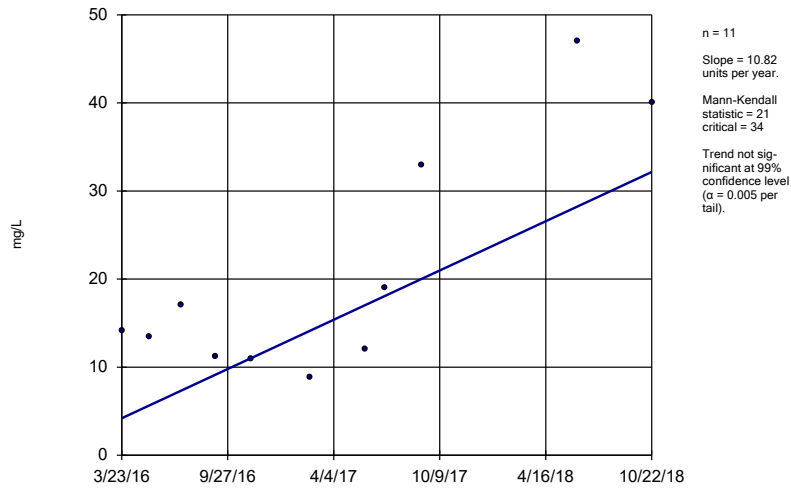
Sen's Slope Estimator

GN-GSA-MW-15 (bg)



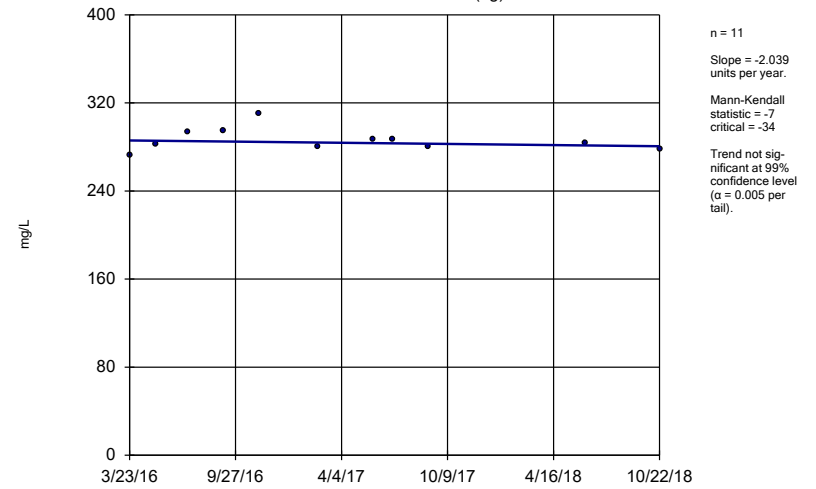
Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-5



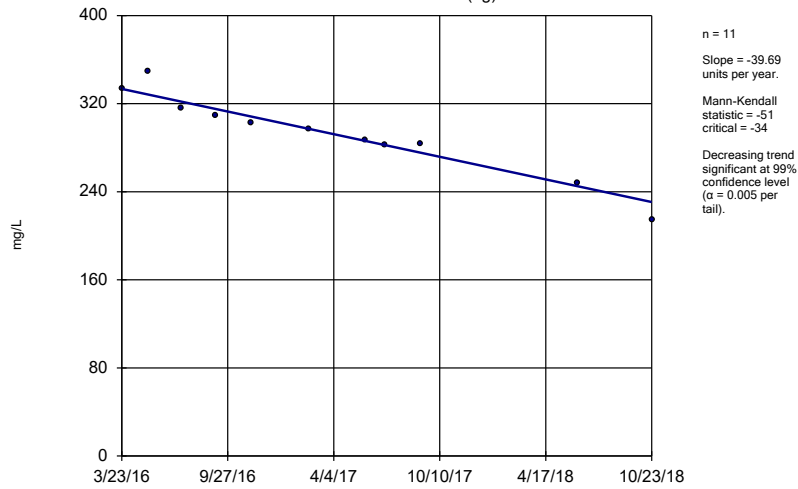
Constituent: Sulfate Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-2 (bg)



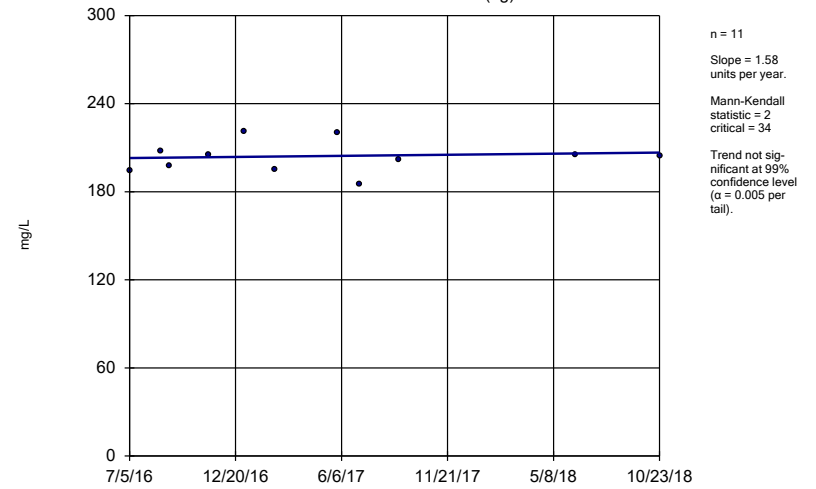
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-3 (bg)



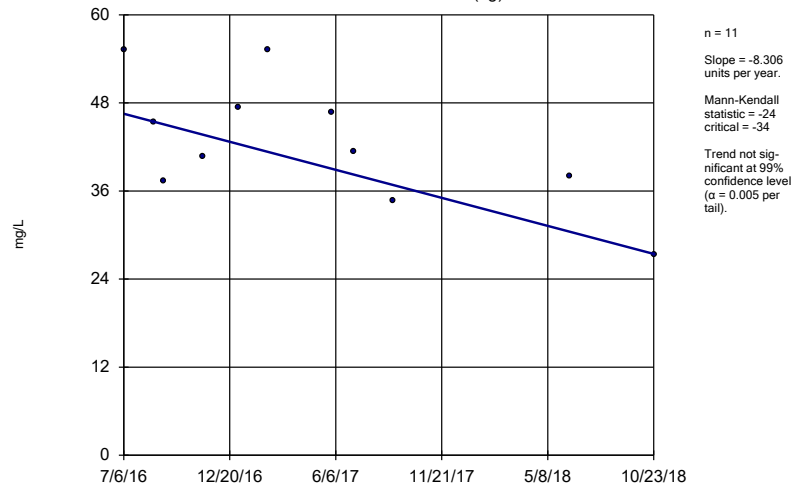
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-14S (bg)



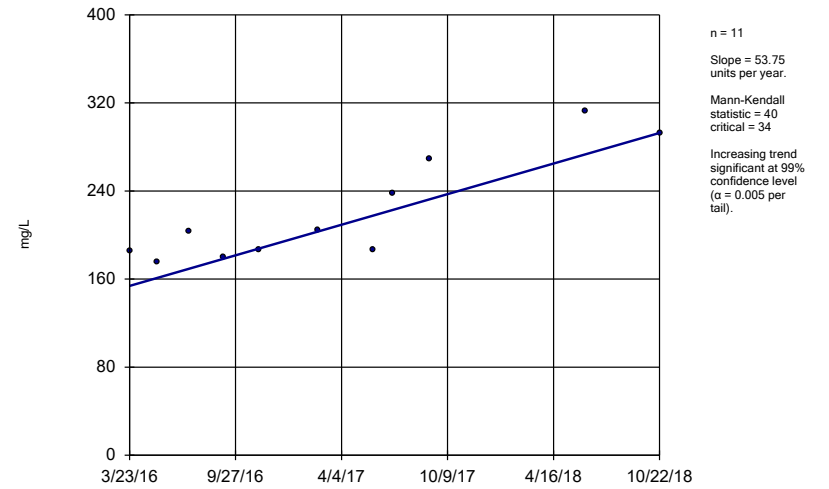
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-15 (bg)



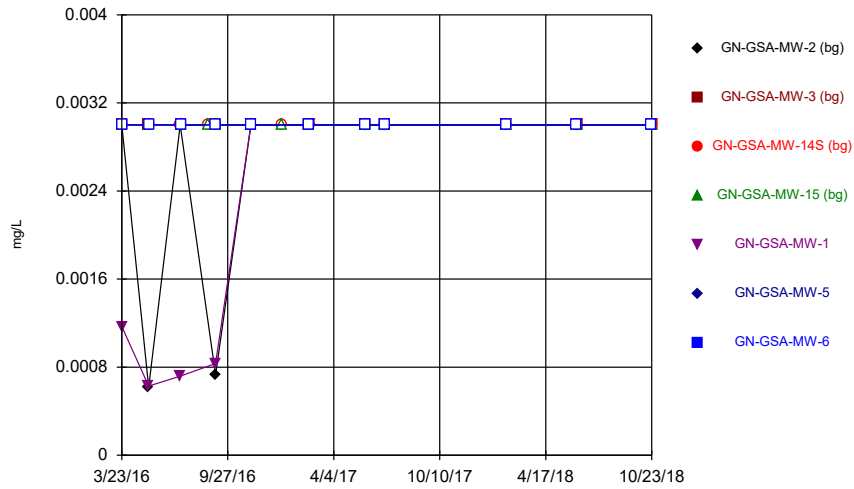
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Sen's Slope Estimator GN-GSA-MW-5



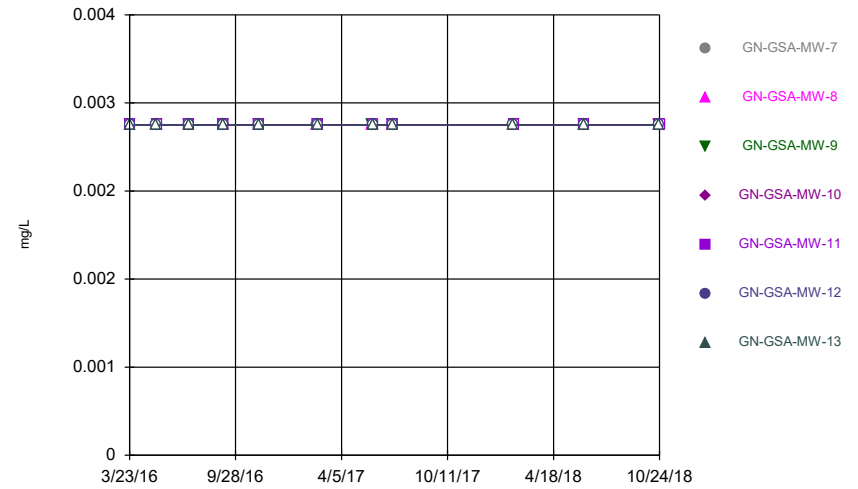
Constituent: TDS Analysis Run 12/18/2018 2:14 PM View: Trend Tests
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



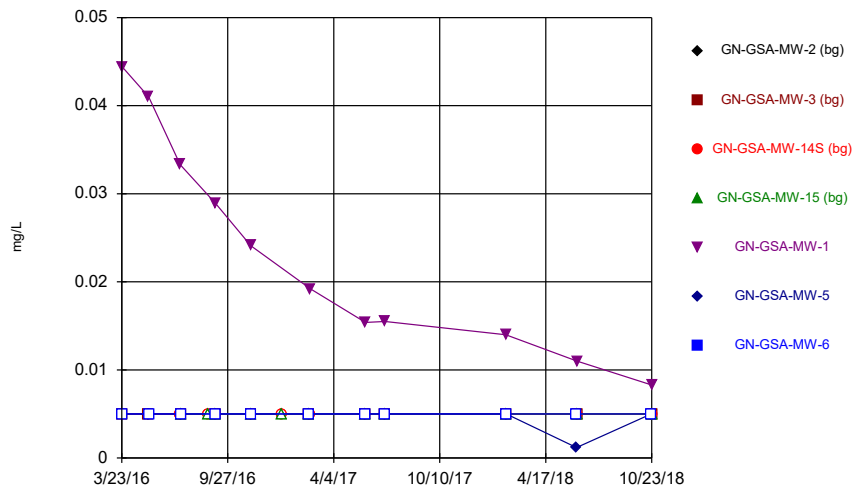
Constituent: Antimony Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



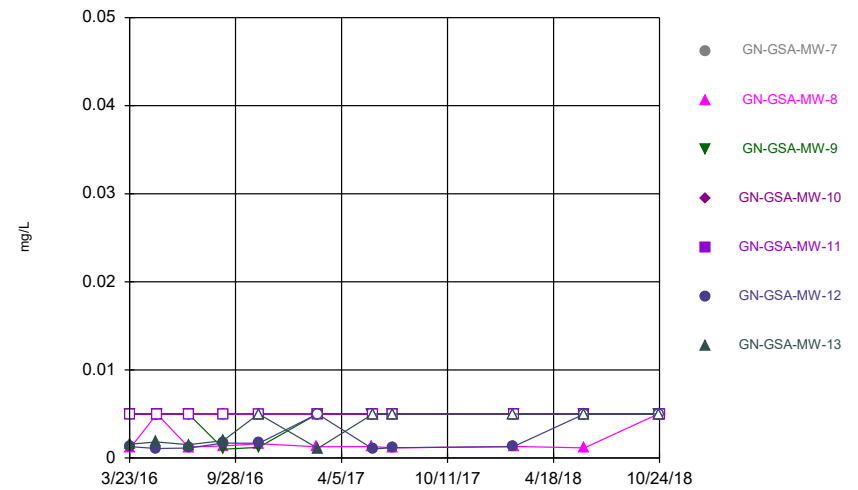
Constituent: Antimony Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



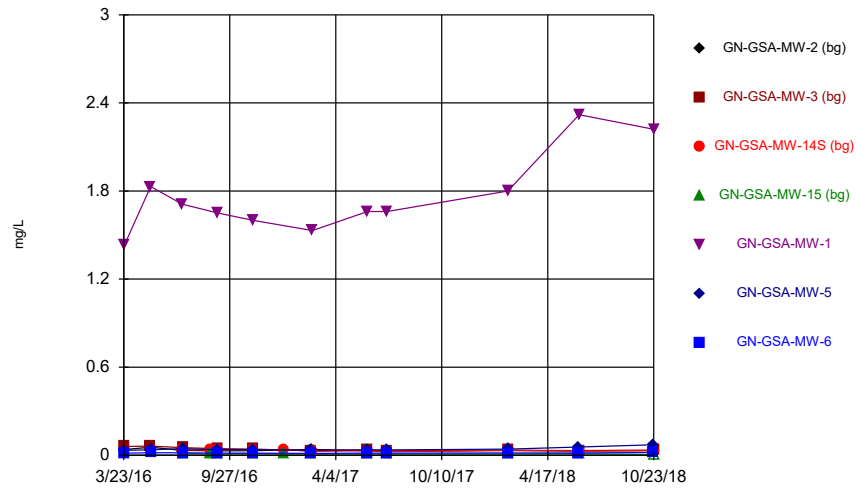
Constituent: Arsenic Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



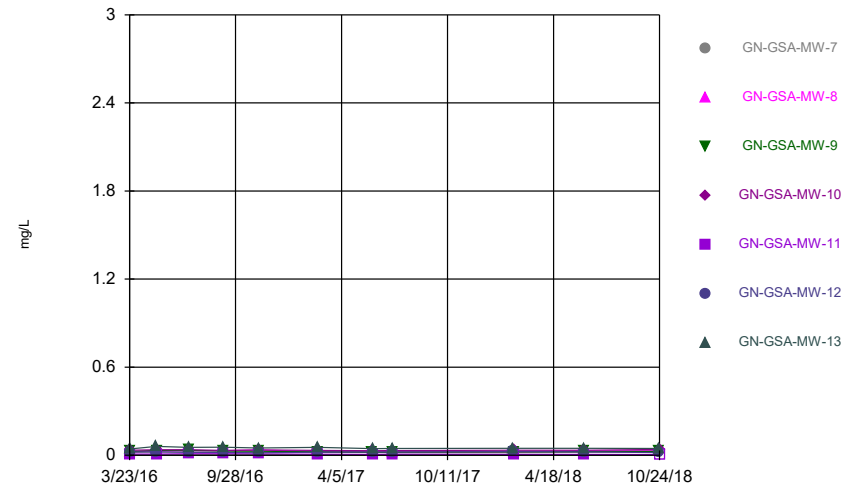
Constituent: Arsenic Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



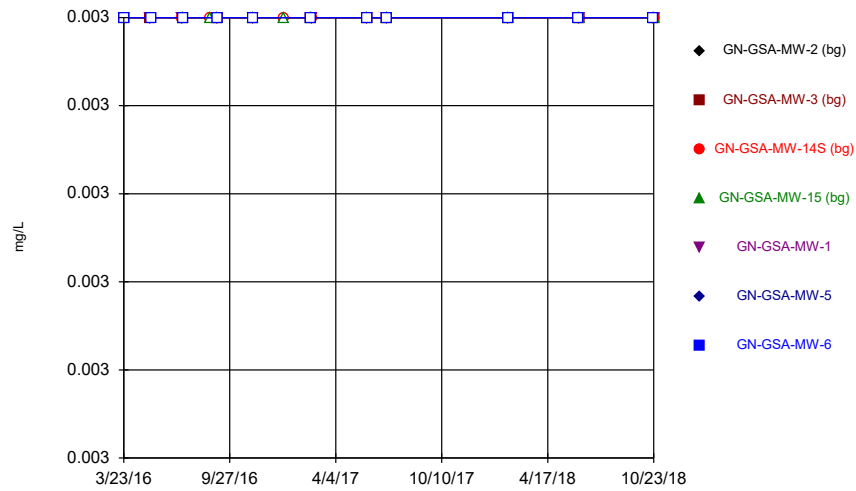
Constituent: Barium Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



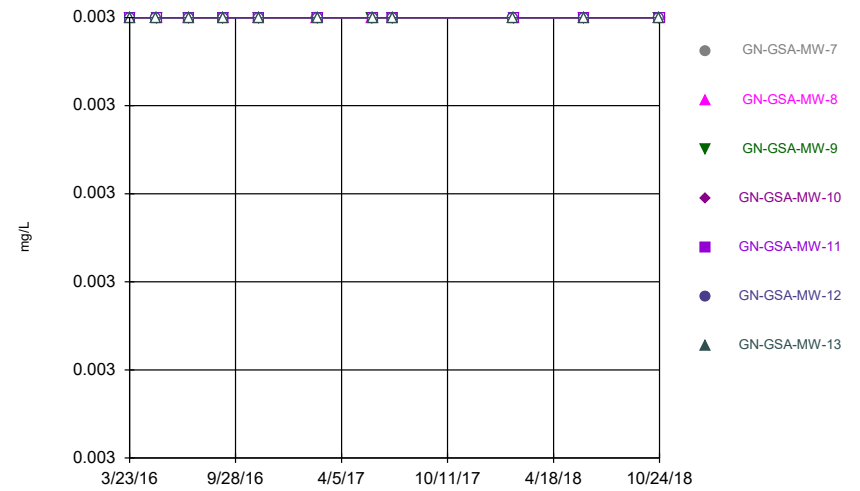
Constituent: Barium Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



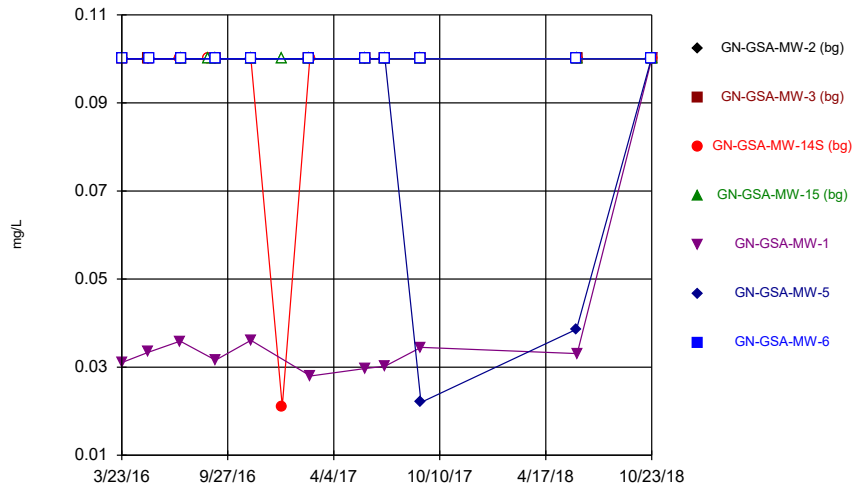
Constituent: Beryllium Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



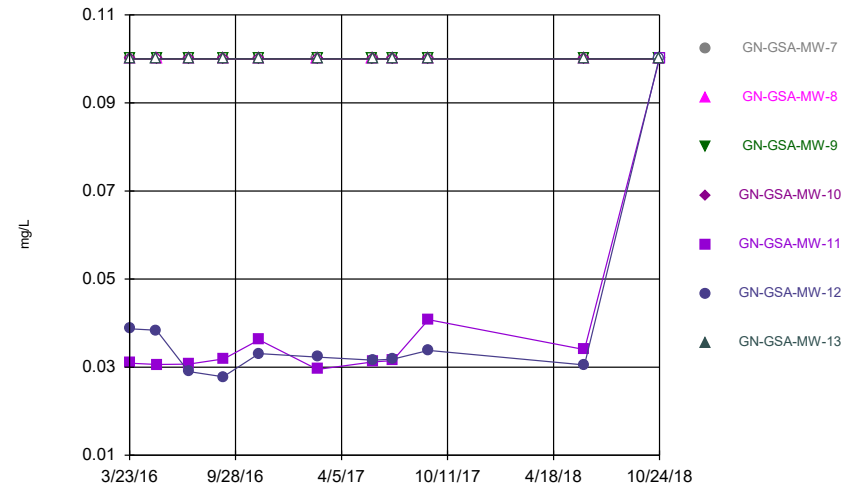
Constituent: Beryllium Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



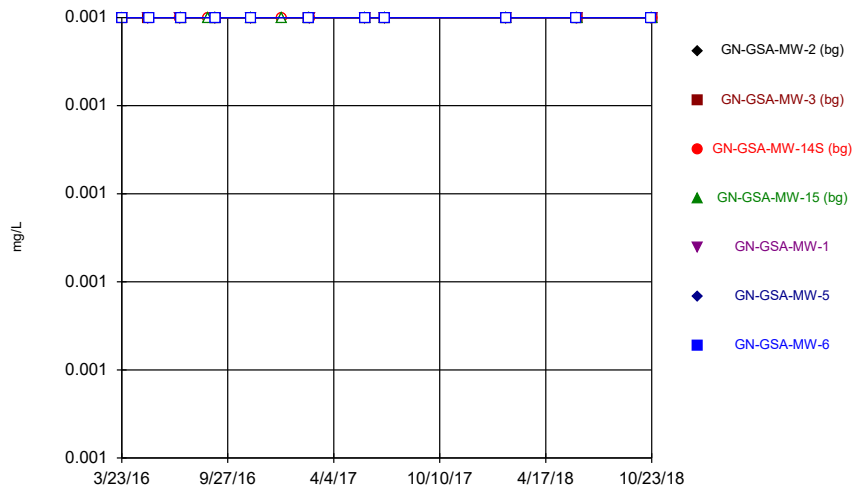
Constituent: Boron Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



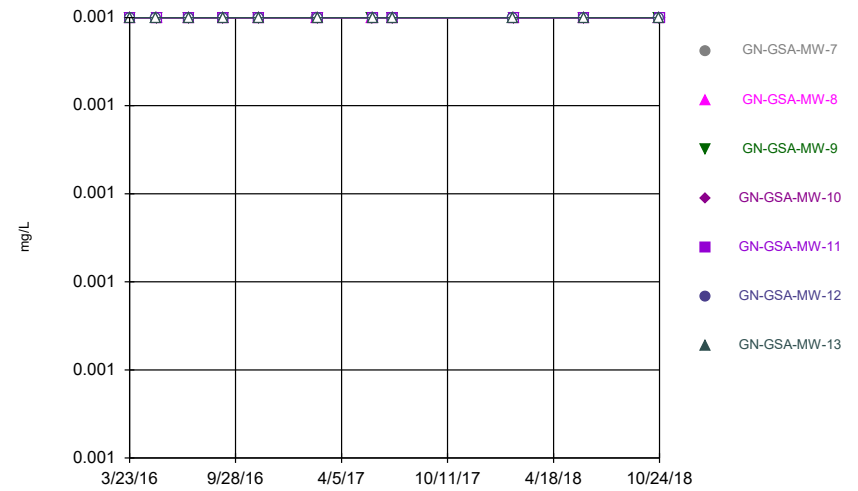
Constituent: Boron Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



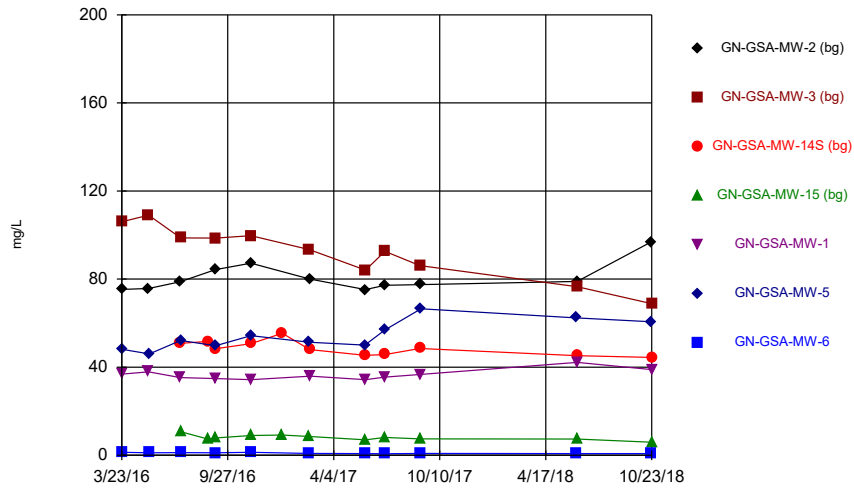
Constituent: Cadmium Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



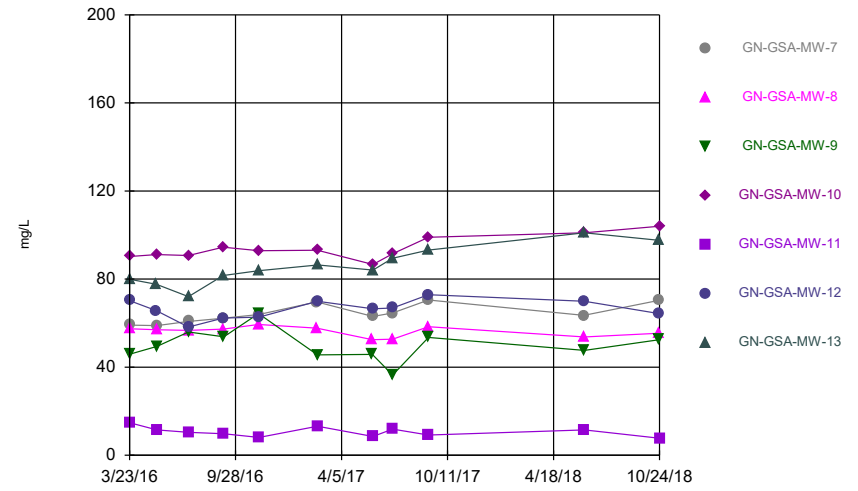
Constituent: Cadmium Analysis Run 12/18/2018 2:11 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



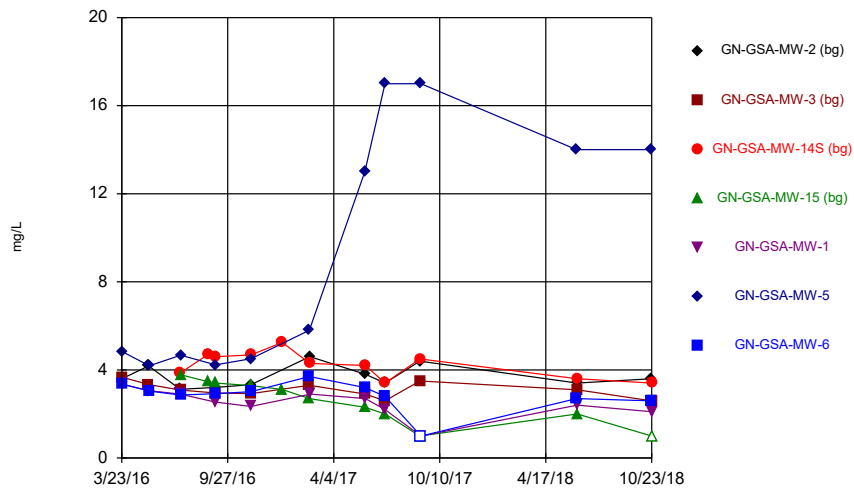
Constituent: Calcium Analysis Run 12/18/2018 2:11 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



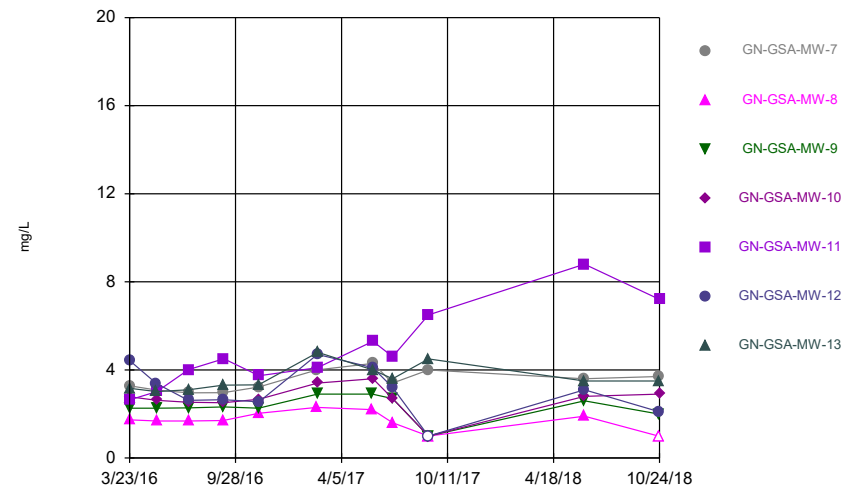
Constituent: Calcium Analysis Run 12/18/2018 2:11 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



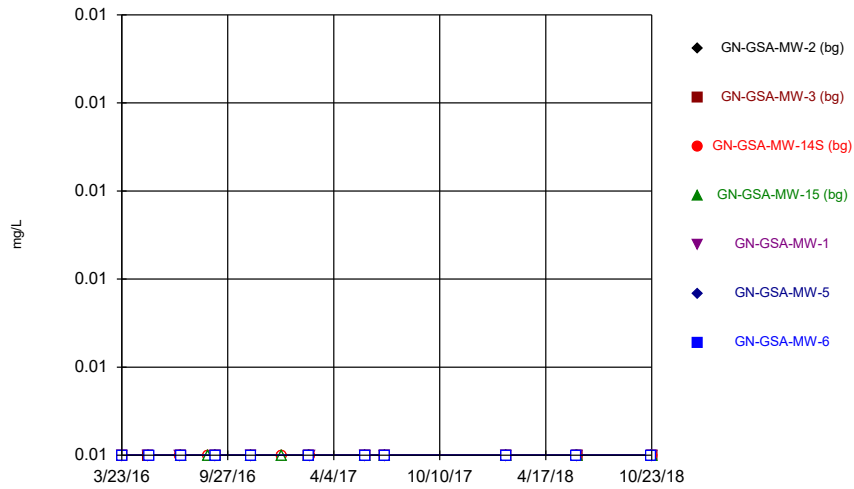
Constituent: Chloride Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



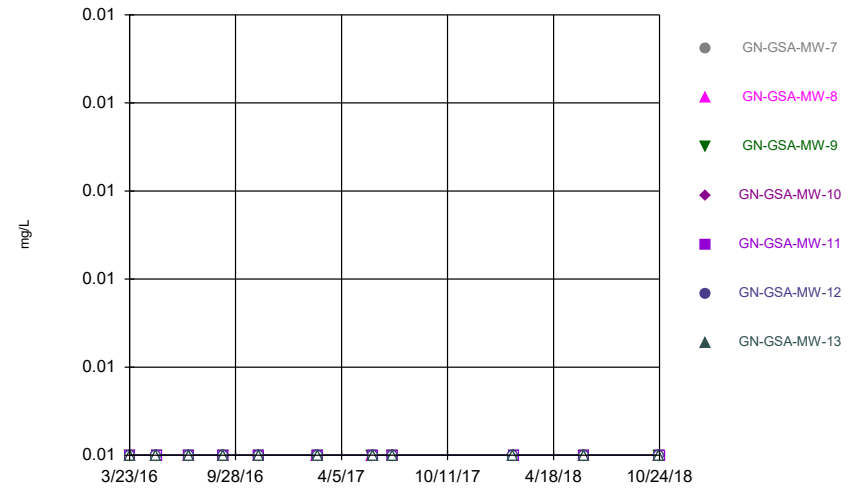
Constituent: Chloride Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



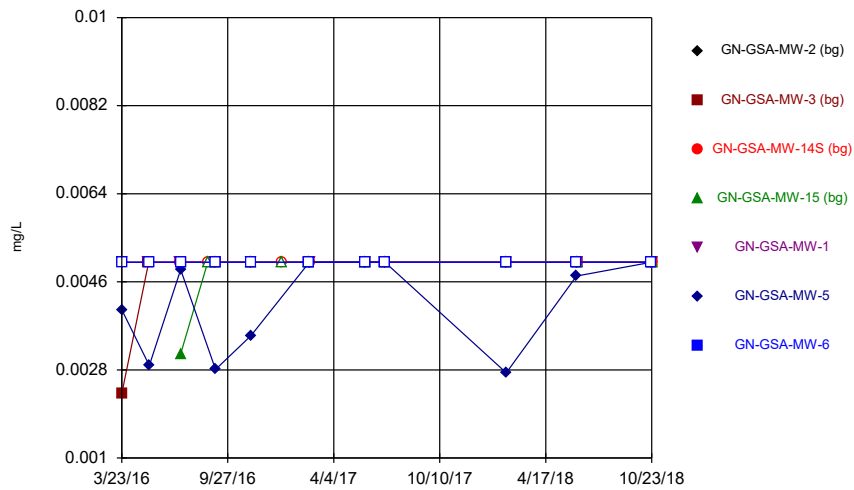
Constituent: Chromium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



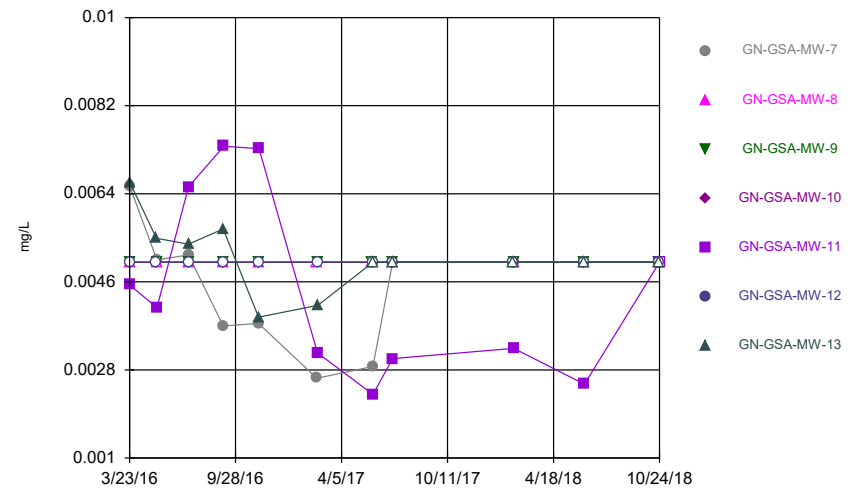
Constituent: Chromium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



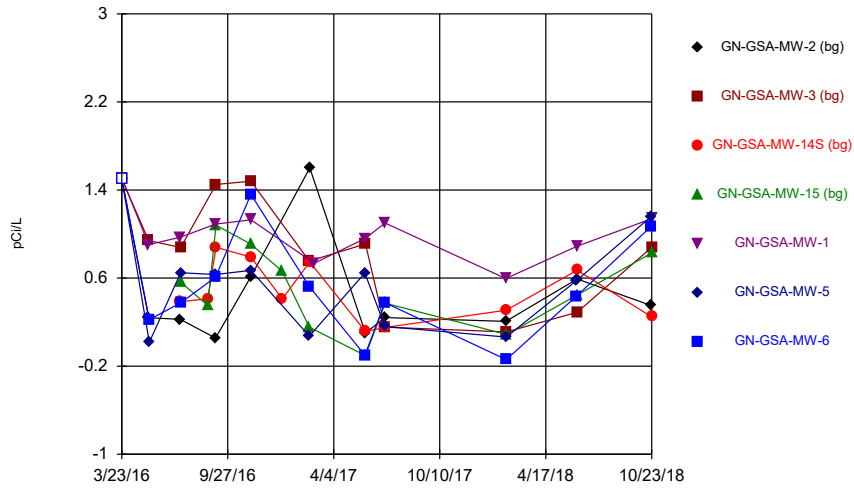
Constituent: Cobalt Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



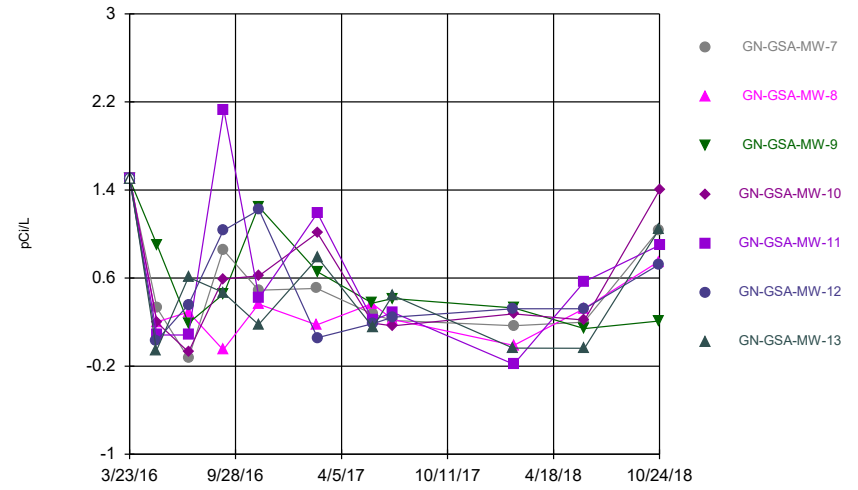
Constituent: Cobalt Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



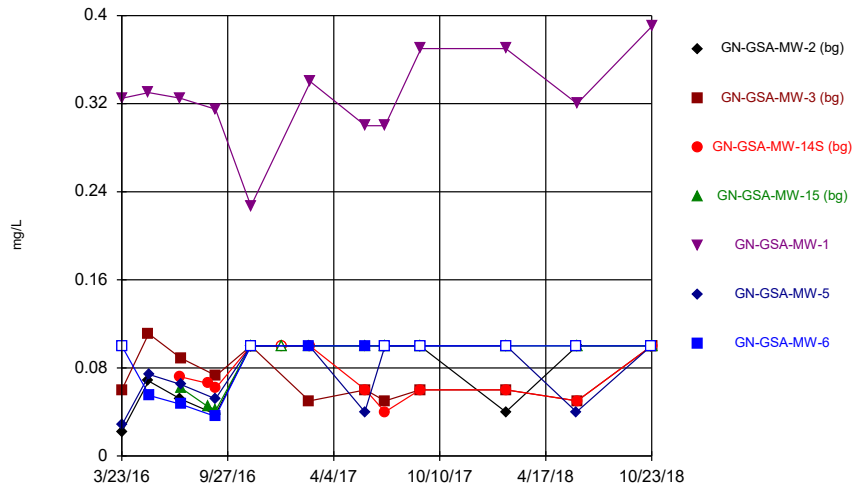
Constituent: Combined Radium 226 + 228 Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



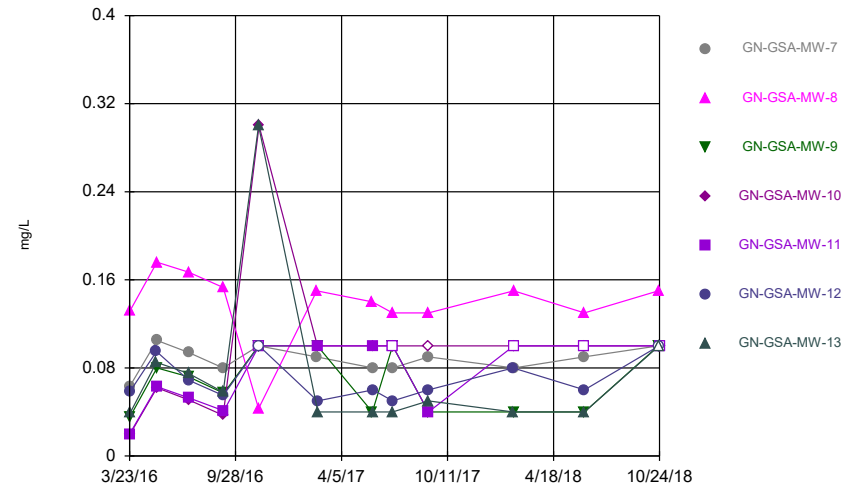
Constituent: Combined Radium 226 + 228 Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



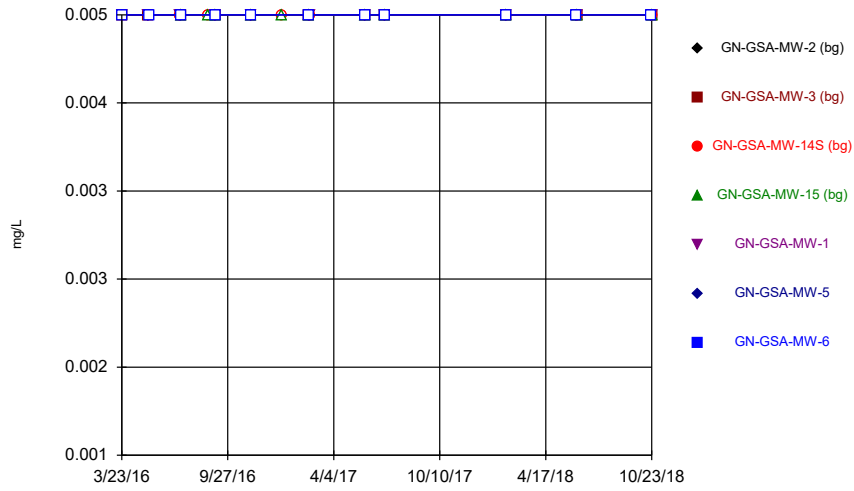
Constituent: Fluoride Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



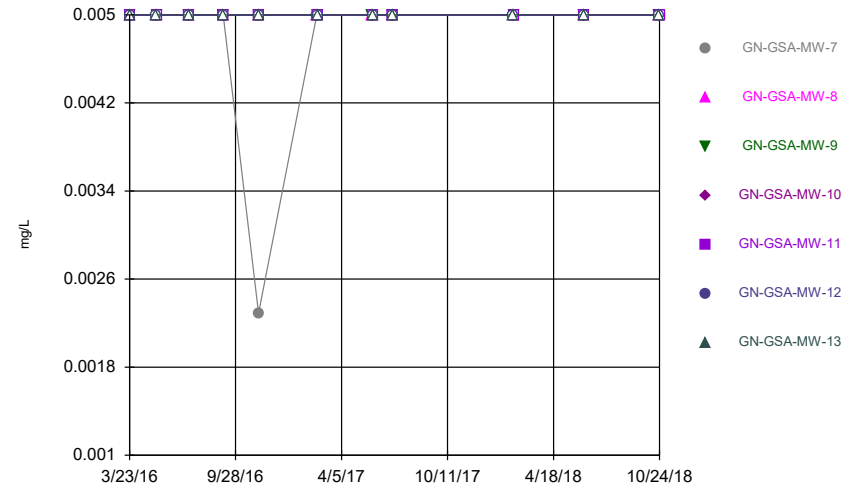
Constituent: Fluoride Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



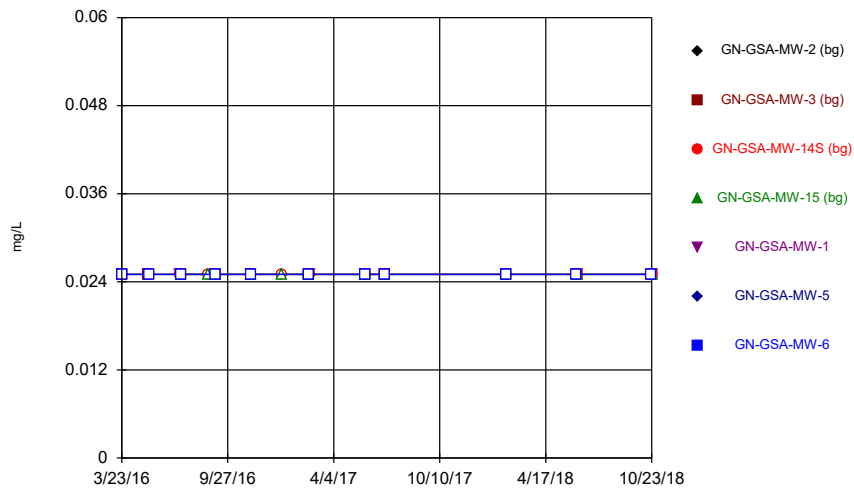
Constituent: Lead Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



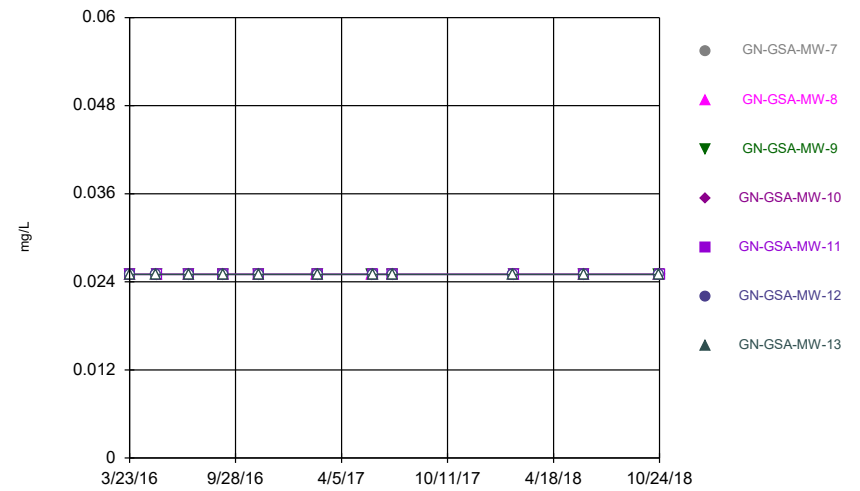
Constituent: Lead Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



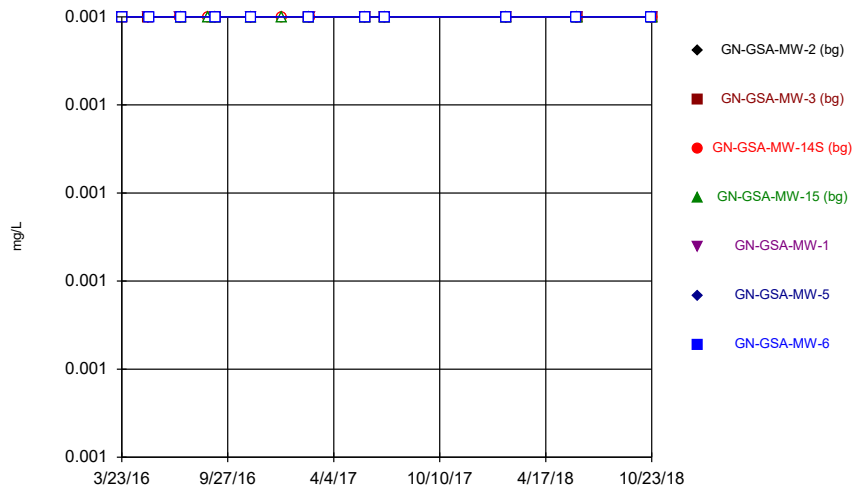
Constituent: Lithium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



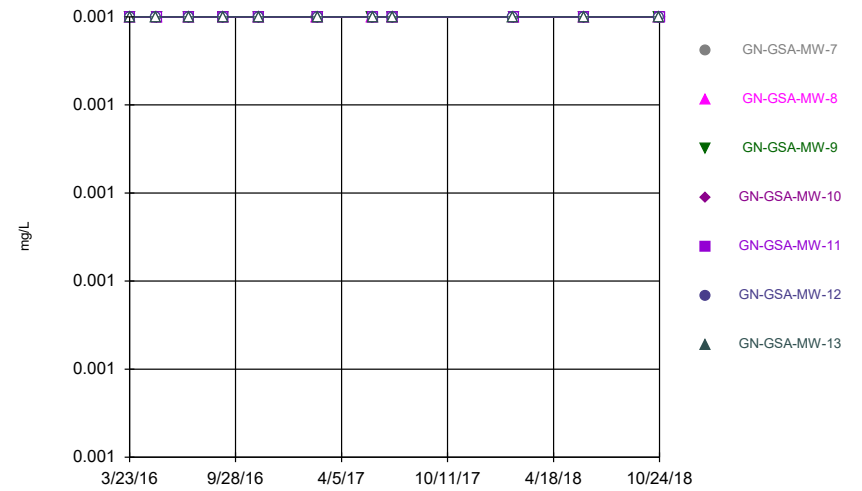
Constituent: Lithium Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



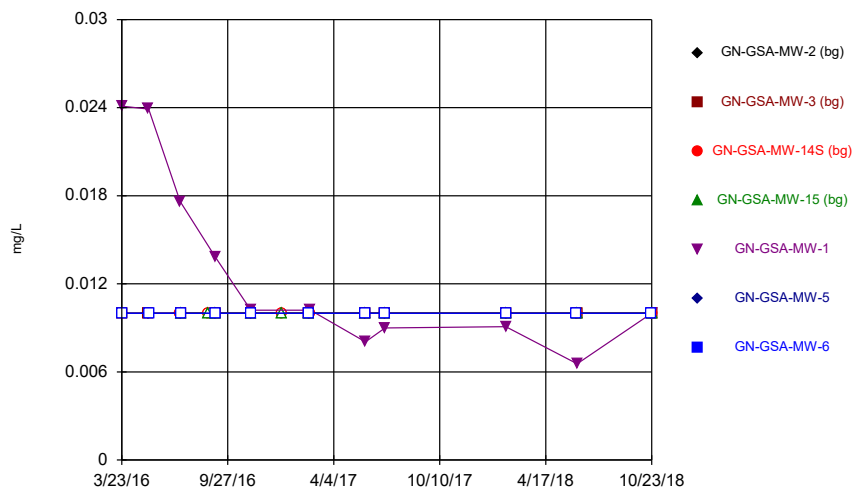
Constituent: Mercury Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



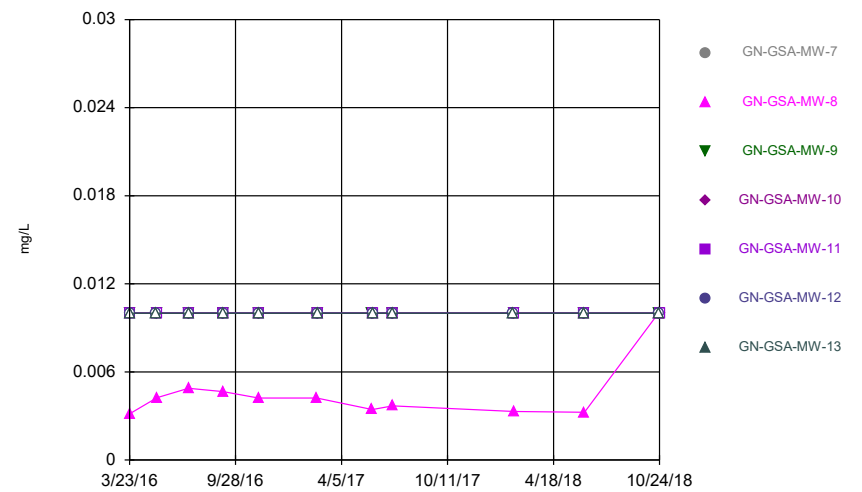
Constituent: Mercury Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



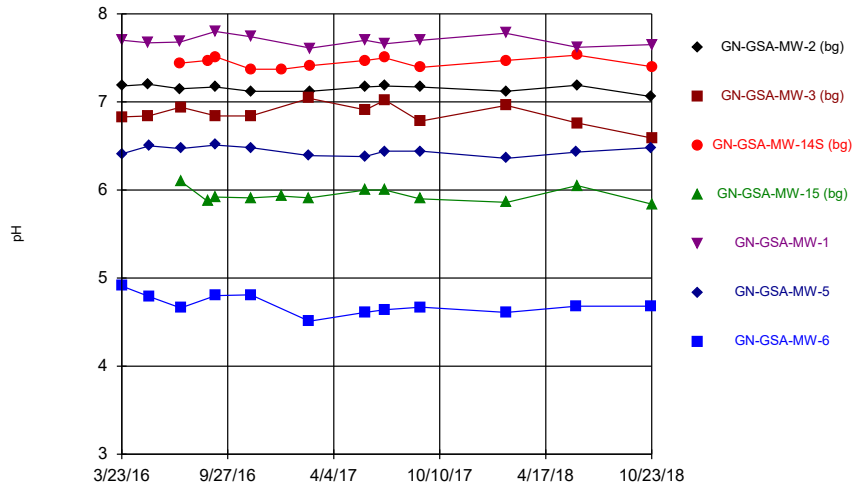
Constituent: Molybdenum Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



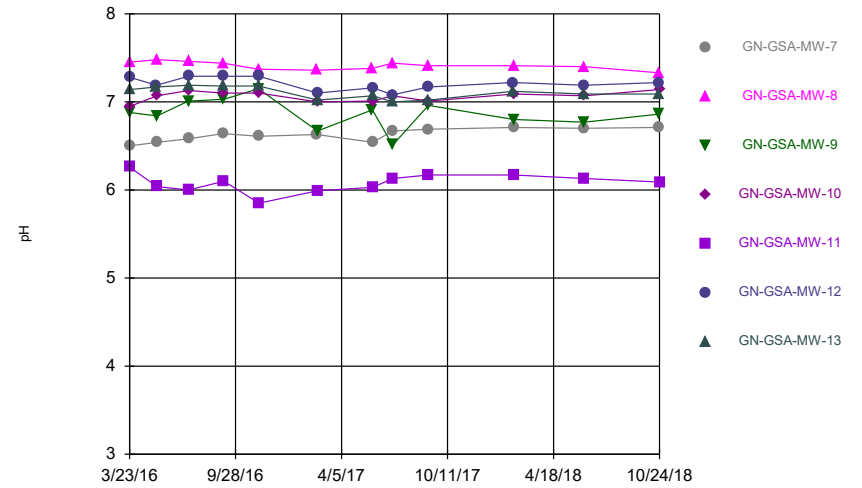
Constituent: Molybdenum Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



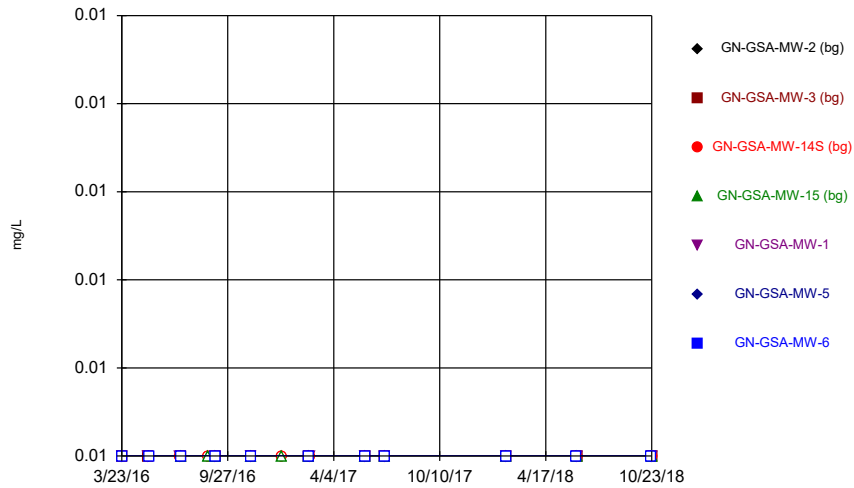
Constituent: pH Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



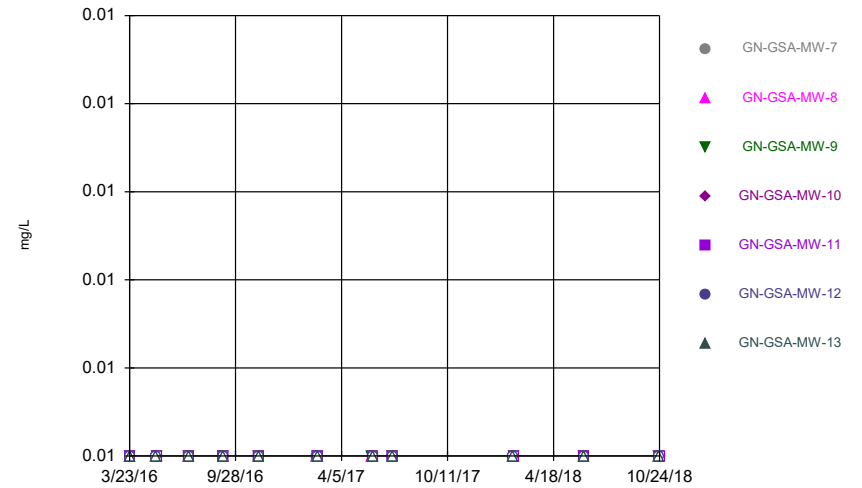
Constituent: pH Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



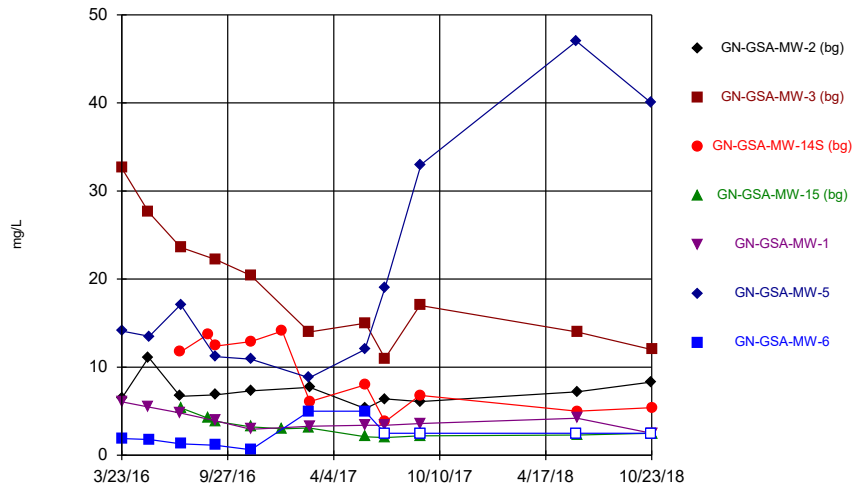
Constituent: Selenium Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



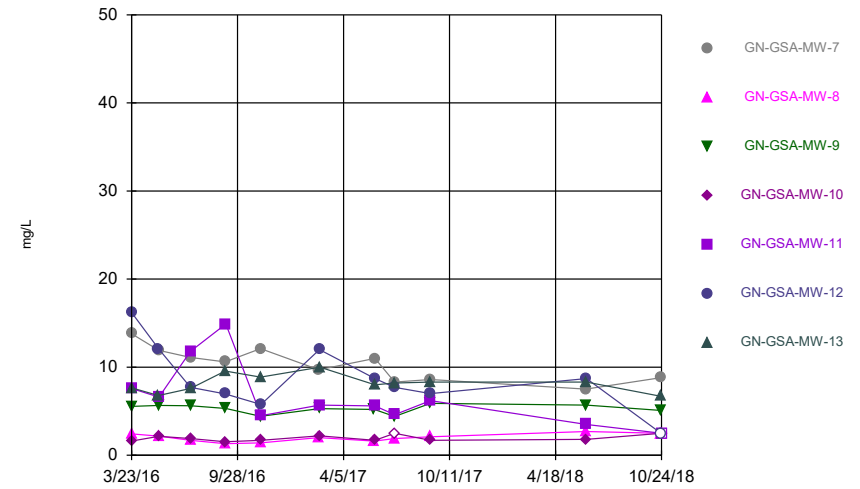
Constituent: Selenium Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



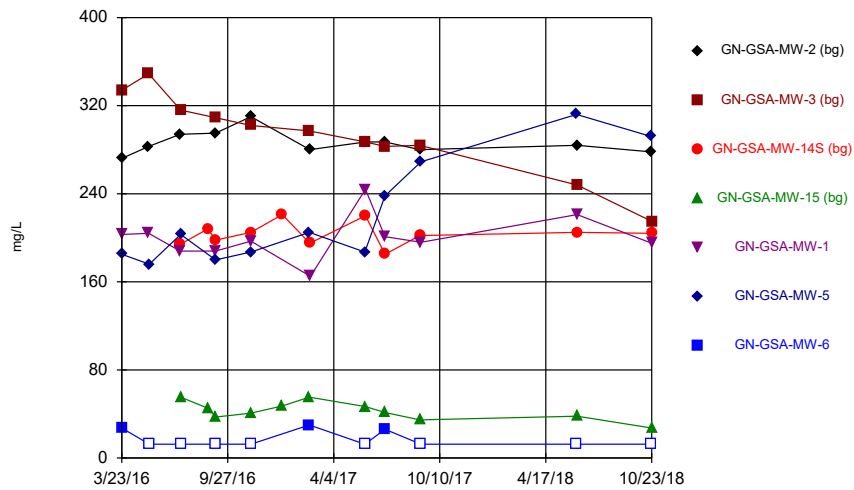
Constituent: Sulfate Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



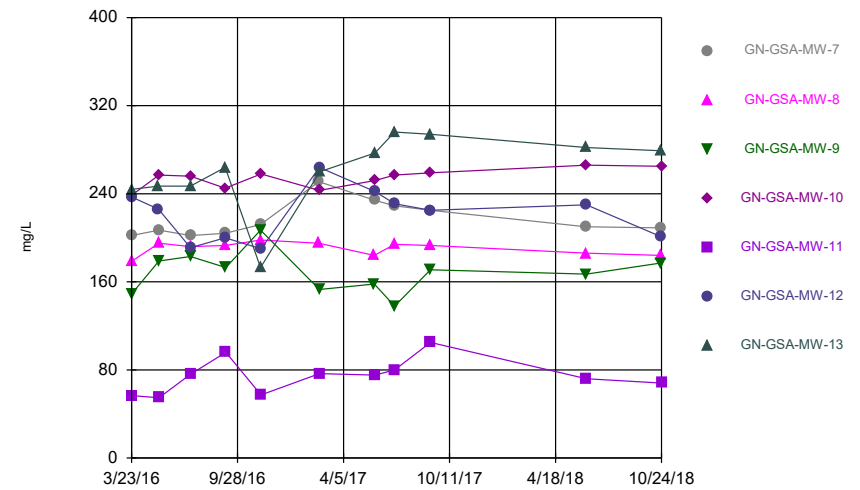
Constituent: Sulfate Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



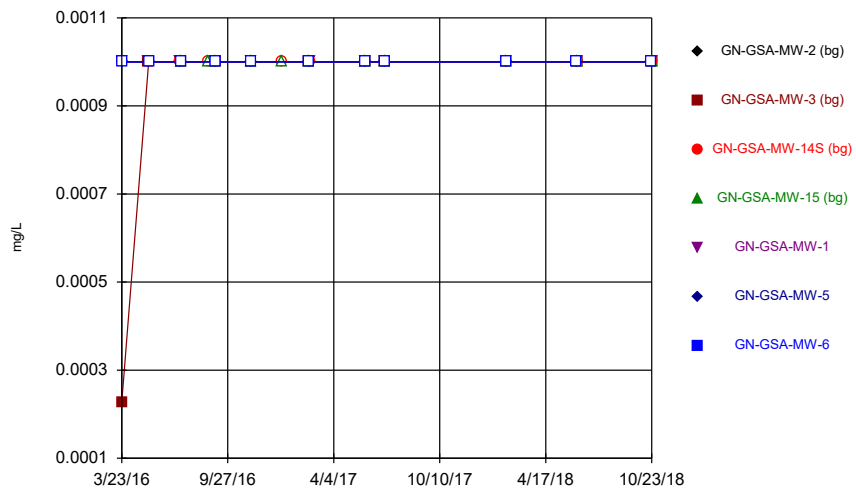
Constituent: TDS Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



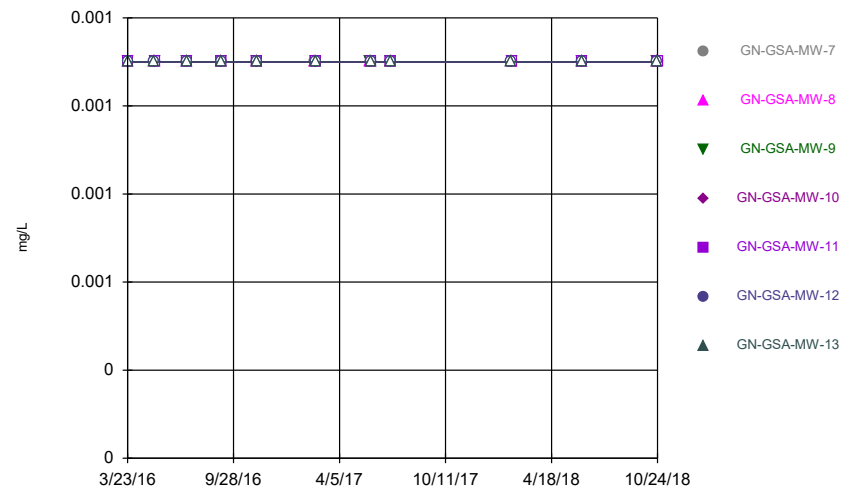
Constituent: TDS Analysis Run 12/18/2018 2:12 PM View: Descriptive
Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



Constituent: Thallium Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Time Series



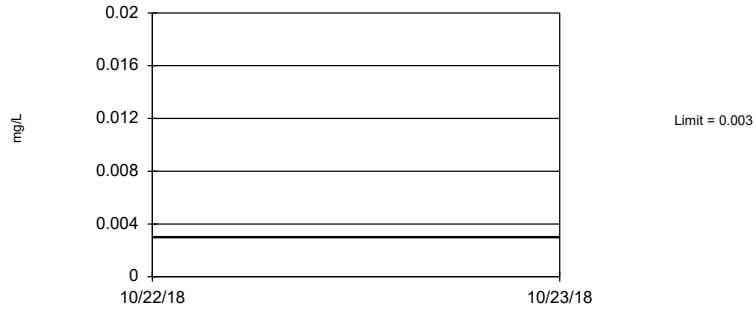
Constituent: Thallium Analysis Run 12/18/2018 2:12 PM View: Descriptive
 Plant Gaston Client: Southern Company Data: Gaston GSA

Upper Tolerance Limits - App IV

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/14/2019, 8:24 AM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	44	n/a	n/a	95.45	n/a	n/a	0.1047	NP Inter(NDs)
Arsenic (mg/L)	0.005	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Barium (mg/L)	0.0622	44	n/a	n/a	2.273	n/a	n/a	0.1047	NP Inter(normal...
Beryllium (mg/L)	0.003	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Boron (mg/L)	0.1	44	n/a	n/a	97.73	n/a	n/a	0.1047	NP Inter(NDs)
Cadmium (mg/L)	0.001	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Chromium (mg/L)	0.01	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Cobalt (mg/L)	0.01	44	n/a	n/a	95.45	n/a	n/a	0.1047	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.6	44	n/a	n/a	4.545	n/a	n/a	0.1047	NP Inter(normal...
Fluoride (mg/L)	0.3	48	n/a	n/a	35.42	n/a	n/a	0.08526	NP Inter(normal...
Lead (mg/L)	0.005	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Lithium (mg/L)	0.02	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Mercury (mg/L)	0.0005	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Molybdenum (mg/L)	0.01	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Selenium (mg/L)	0.01	44	n/a	n/a	100	n/a	n/a	0.1047	NP Inter(NDs)
Thallium (mg/L)	0.001	44	n/a	n/a	97.73	n/a	n/a	0.1047	NP Inter(NDs)

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 44 background values. 95.45% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Antimony Analysis Run 1/14/2019 8:22 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

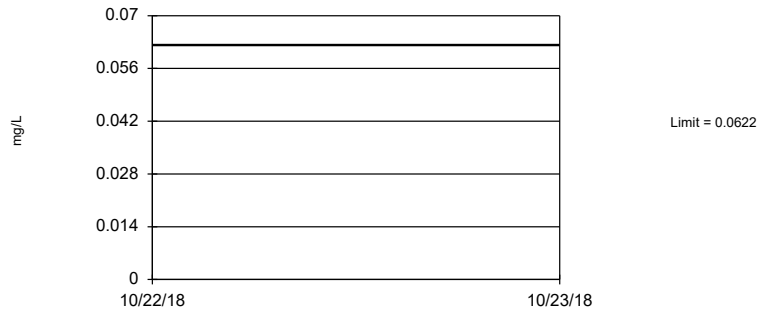
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Arsenic Analysis Run 1/14/2019 8:22 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

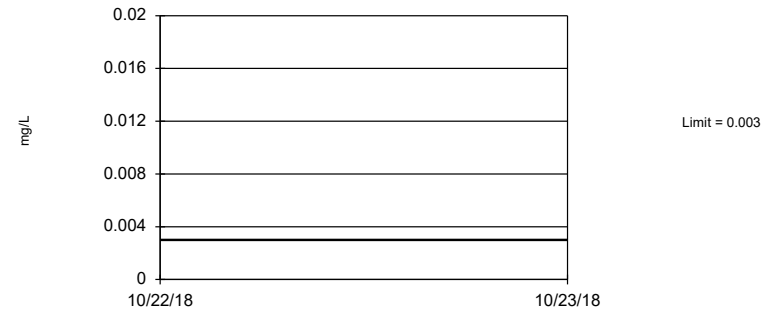
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 2.273% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Barium Analysis Run 1/14/2019 8:22 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

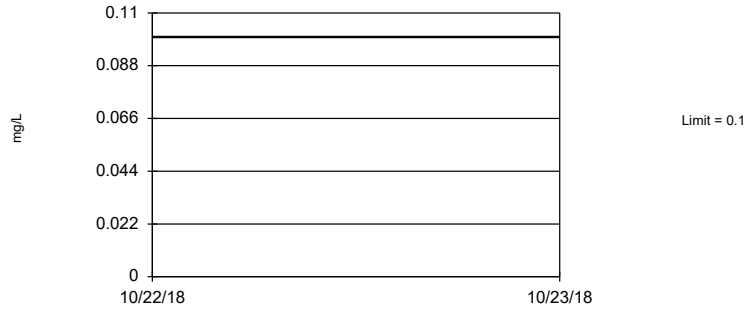
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Beryllium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 44 background values. 97.73% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Boron Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Cadmium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

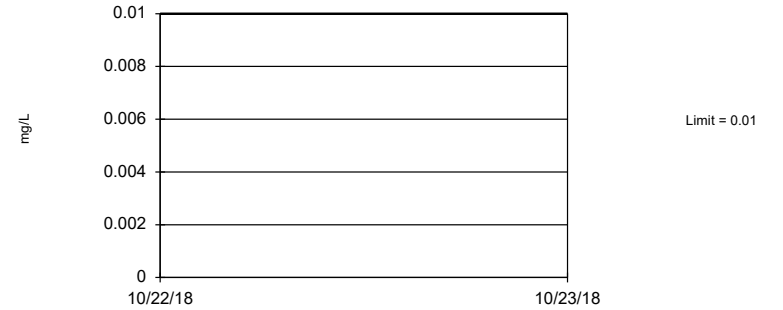
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Chromium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

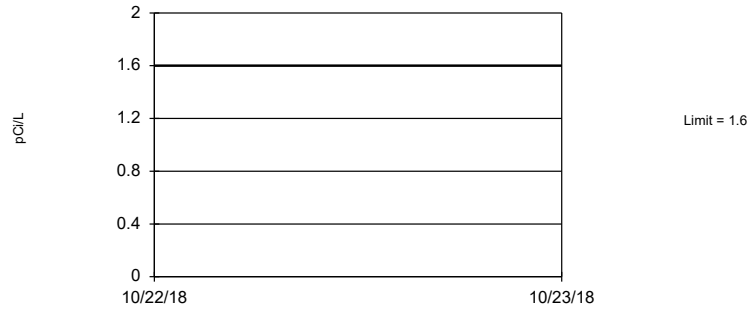
Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 44 background values. 95.45% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Cobalt Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

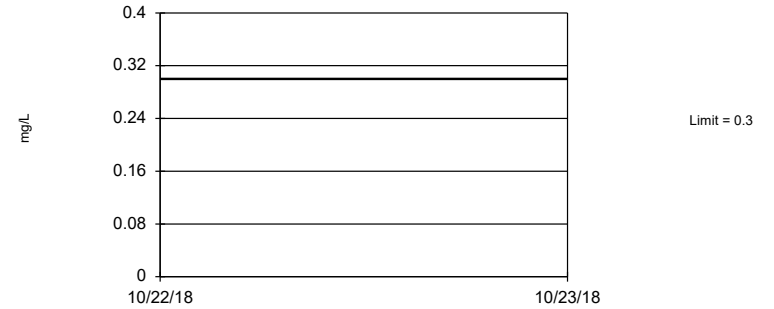
Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 44 background values. 4.545% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Combined Radium 226 + 228 Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 48 background values. 35.42% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08526.

Constituent: Fluoride Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

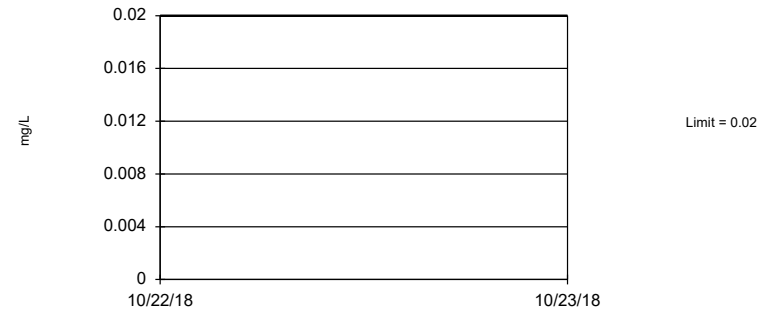
Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Lead Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

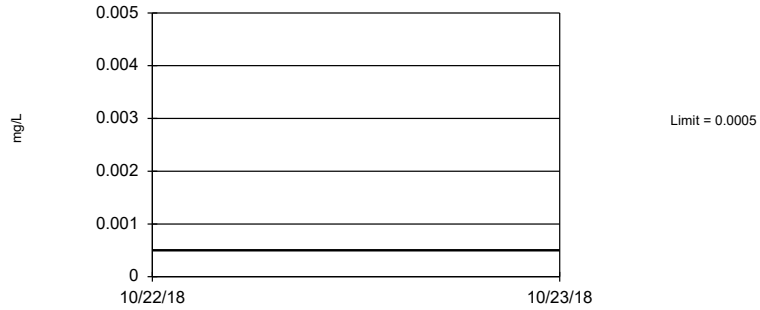
Tolerance Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Lithium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Mercury Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Molybdenum Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Selenium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 44 background values. 97.73% NDs. 90.04% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.24% coverage at alpha=0.5. Report alpha = 0.1047.

Constituent: Thallium Analysis Run 1/14/2019 8:23 AM View: Tolerance Limits
Plant Gaston Client: Southern Company Data: Gaston GSA

Confidence Intervals - All Results (No Significant Results)

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GN-GSA-MW-1	0.0015	0.000629	0.006	No	11	63.64	No	0.006	NP (normality)
Antimony (mg/L)	GN-GSA-MW-5	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-6	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-7	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-8	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-9	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-10	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-11	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-12	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	GN-GSA-MW-13	0.0015	0.0015	0.006	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-1	0.02424	0.009854	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	GN-GSA-MW-5	0.0025	0.00119	0.01	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-6	0.0025	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-7	0.0025	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-8	0.0025	0.00112	0.01	No	11	18.18	No	0.006	NP (normality)
Arsenic (mg/L)	GN-GSA-MW-9	0.0025	0.00101	0.01	No	11	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-10	0.0025	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-11	0.0025	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	GN-GSA-MW-12	0.0025	0.00102	0.01	No	11	27.27	No	0.006	NP (Cohens/xfrm)
Arsenic (mg/L)	GN-GSA-MW-13	0.0025	0.0011	0.01	No	11	54.55	No	0.006	NP (normality)
Barium (mg/L)	GN-GSA-MW-1	1.993	1.536	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-5	0.056	0.0333	2	No	11	0	No	0.006	NP (normality)
Barium (mg/L)	GN-GSA-MW-6	0.01664	0.01405	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-7	0.02172	0.01904	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-8	0.03157	0.02585	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-9	0.03003	0.02291	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-10	0.0369	0.0327	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-11	0.008811	0.00596	2	No	11	9.091	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-12	0.02334	0.01915	2	No	11	0	No	0.01	Param.
Barium (mg/L)	GN-GSA-MW-13	0.05416	0.04517	2	No	11	0	No	0.01	Param.
Beryllium (mg/L)	GN-GSA-MW-1	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-5	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-6	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-7	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-8	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-9	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-10	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-11	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-12	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	GN-GSA-MW-13	0.0015	0.0015	0.004	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-1	0.0361	0.028	4	No	11	9.091	No	0.006	NP (normality)
Boron (mg/L)	GN-GSA-MW-5	0.05	0.022	4	No	11	81.82	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-6	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-7	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-8	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-9	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-10	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Boron (mg/L)	GN-GSA-MW-11	0.0408	0.0295	4	No	11	9.091	No	0.006	NP (normality)
Boron (mg/L)	GN-GSA-MW-12	0.03912	0.02932	4	No	11	9.091	sqrt(x)	0.01	Param.
Boron (mg/L)	GN-GSA-MW-13	0.05	0.05	4	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-1	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-5	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-6	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-7	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-8	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-9	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-10	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-11	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)

Confidence Intervals - All Results (No Significant Results)

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	GN-GSA-MW-12	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	GN-GSA-MW-13	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-1	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-5	0.005	0.0025	0.01	No	11	36.36	No	0.006	NP (normality)
Cobalt (mg/L)	GN-GSA-MW-6	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-7	0.01104	0.003631	0.01	No	11	36.36	No	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-8	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-9	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-10	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-11	0.005716	0.002662	0.01	No	11	9.091	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GN-GSA-MW-12	0.005	0.0025	0.01	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	GN-GSA-MW-13	0.01227	0.005189	0.01	No	11	45.45	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-1	1.199	0.8042	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-5	0.9511	0.1666	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-6	1.016	0.1168	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-7	0.8824	0.1065	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-8	0.748	-0.0526	5	No	11	9.091	No	0.006	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-9	0.9601	0.2081	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-10	0.9964	0.112	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-11	1.242	0.06572	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-12	0.9607	0.1291	5	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GN-GSA-MW-13	0.8734	0.04335	5	No	11	9.091	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-1	0.359	0.293	4	No	12	0	No	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-5	0.1	0.04	4	No	12	41.67	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-6	0.15	0.047	4	No	12	58.33	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-7	0.1067	0.07603	4	No	12	8.333	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-8	0.1601	0.1194	4	No	12	0	x^2	0.01	Param.
Fluoride (mg/L)	GN-GSA-MW-9	0.1	0.035	4	No	12	25	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-10	0.1	0.037	4	No	12	41.67	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-11	0.1	0.04	4	No	12	41.67	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	GN-GSA-MW-12	0.095	0.05	4	No	12	16.67	No	0.01	NP (normality)
Fluoride (mg/L)	GN-GSA-MW-13	0.085	0.039	4	No	12	8.333	No	0.01	NP (normality)
Lead (mg/L)	GN-GSA-MW-1	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-5	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-6	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-7	0.0025	0.00229	0.015	No	11	90.91	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-8	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-9	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-10	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-11	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-12	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	GN-GSA-MW-13	0.0025	0.0025	0.015	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-1	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-5	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-6	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-7	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-8	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-9	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-10	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-11	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-12	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Lithium (mg/L)	GN-GSA-MW-13	0.025	0.01	0.04	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-1	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-5	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-6	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-7	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-8	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-9	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-10	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-11	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-12	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Mercury (mg/L)	GN-GSA-MW-13	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-1	0.01801	0.006982	0.1	No	11	9.091	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-5	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-6	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-7	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-8	0.004568	0.003448	0.1	No	11	9.091	No	0.01	Param.
Molybdenum (mg/L)	GN-GSA-MW-9	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)

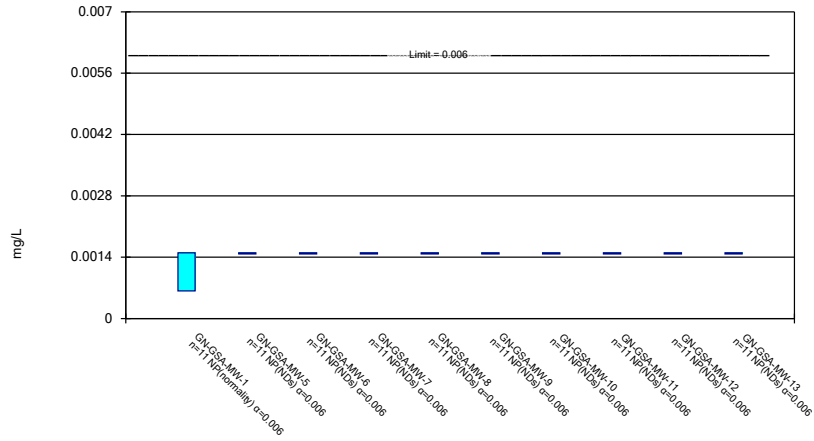
Confidence Intervals - All Results (No Significant Results)

Plant Gaston Client: Southern Company Data: Gaston GSA Printed 1/31/2019, 11:37 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Molybdenum (mg/L)	GN-GSA-MW-10	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-11	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-12	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	GN-GSA-MW-13	0.005	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-1	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-5	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-6	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-7	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-8	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-9	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-10	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-11	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-12	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	GN-GSA-MW-13	0.005	0.005	0.05	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-1	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-5	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-6	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-7	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-8	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-9	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-10	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-11	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-12	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	GN-GSA-MW-13	0.0005	0.0005	0.002	No	11	100	No	0.006	NP (NDs)

Non-Parametric Confidence Interval

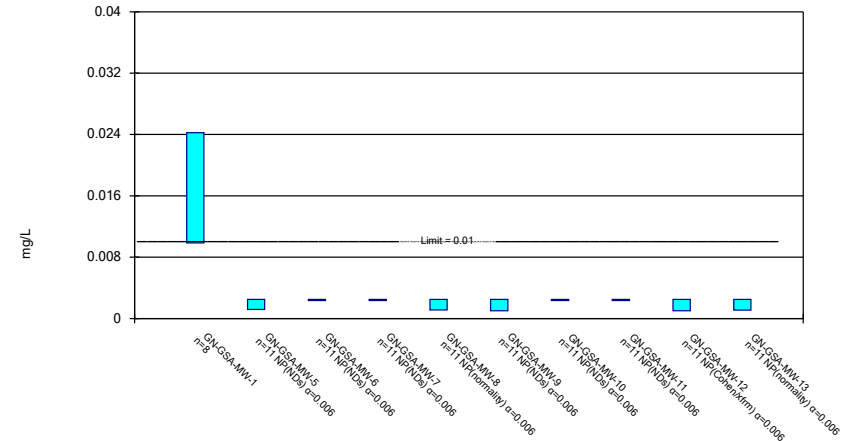
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

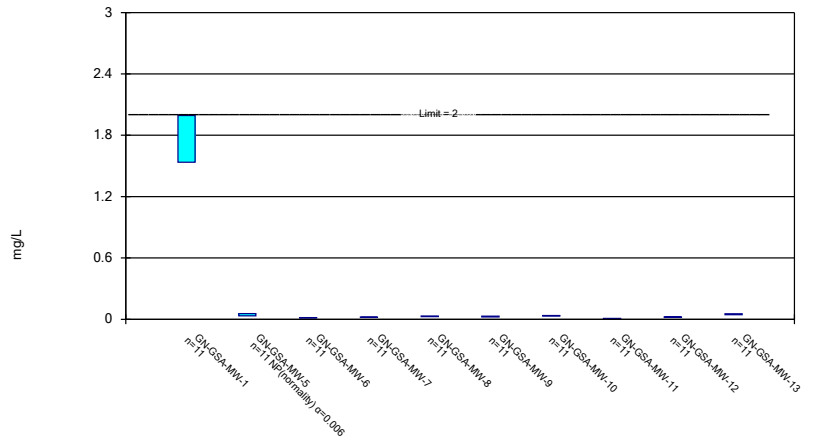
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

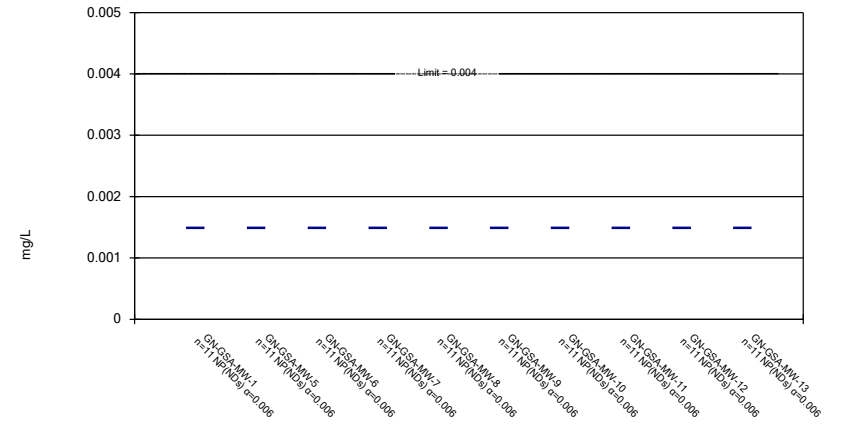
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

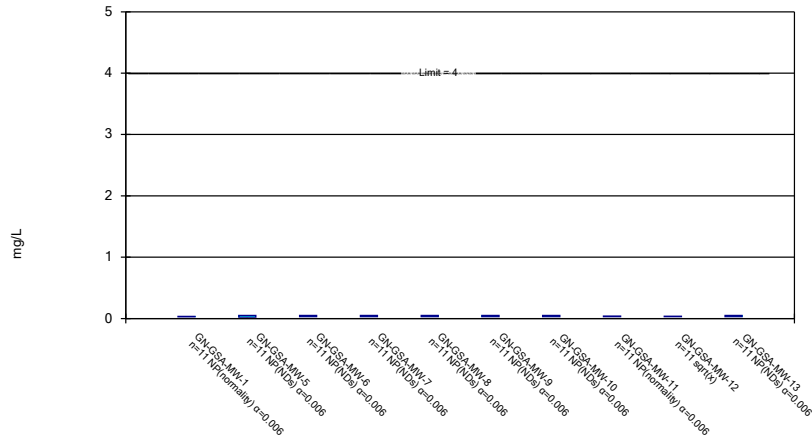
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

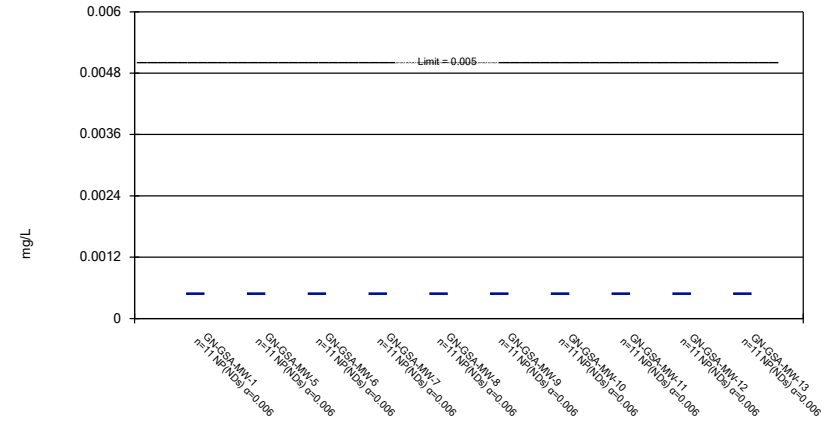
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Boron Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

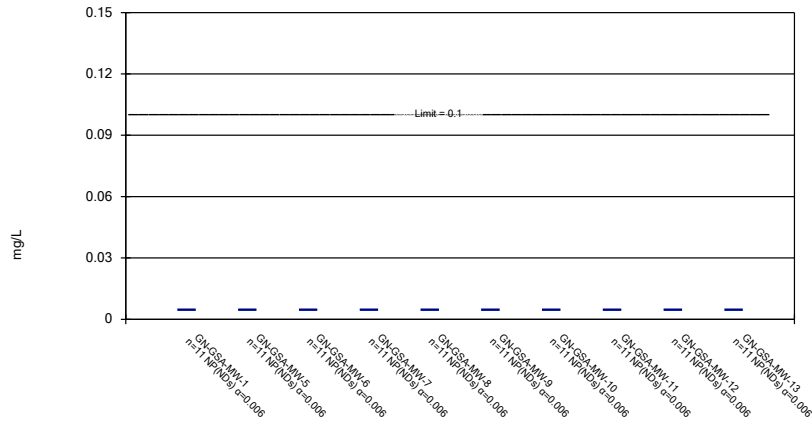
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

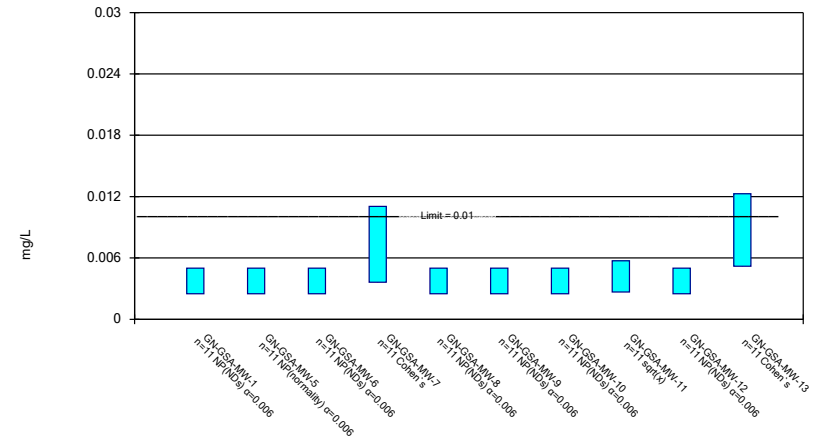
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

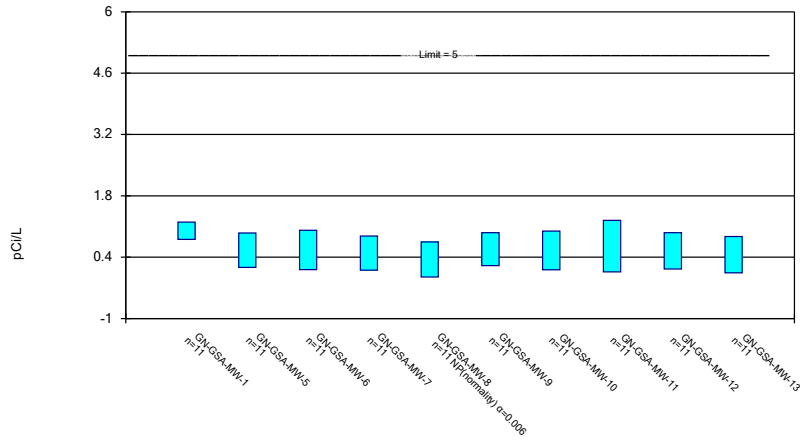
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

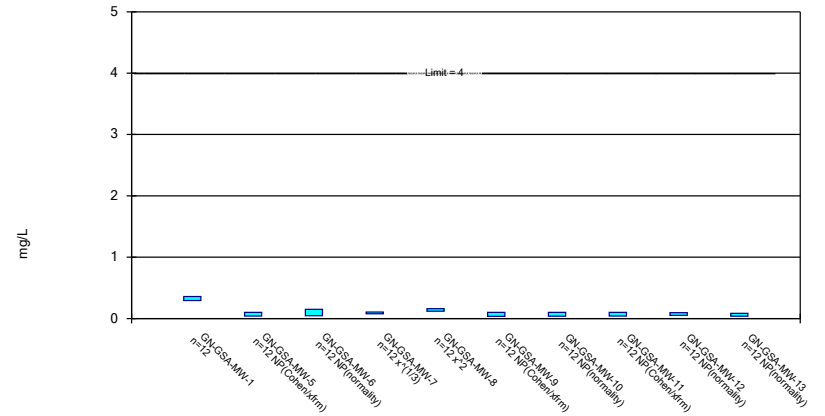
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

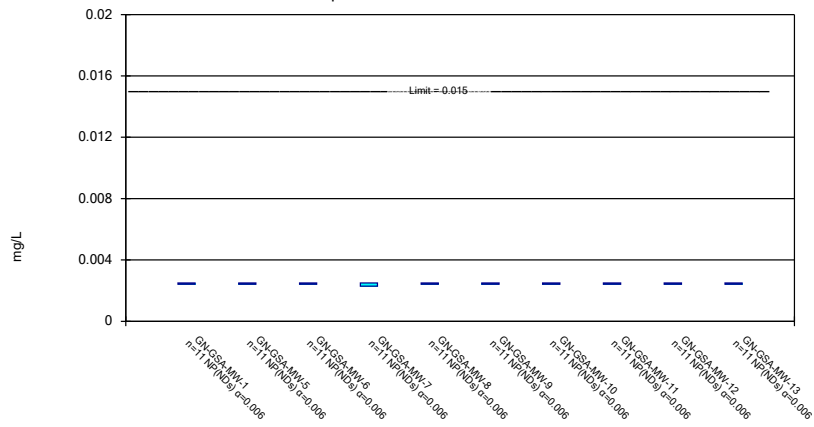
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

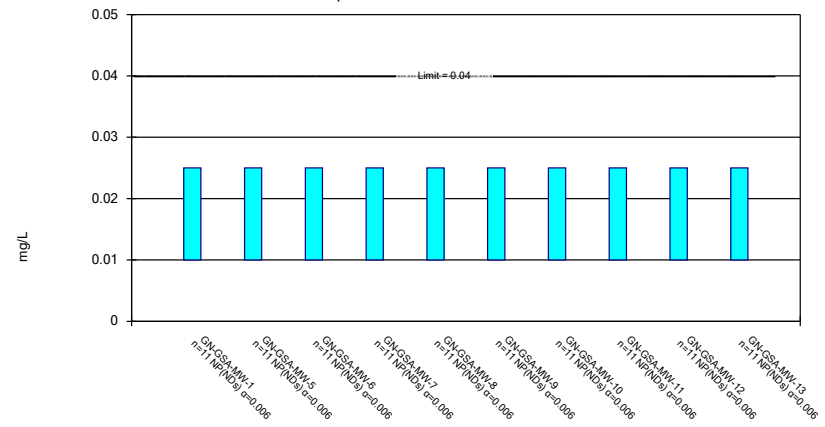
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

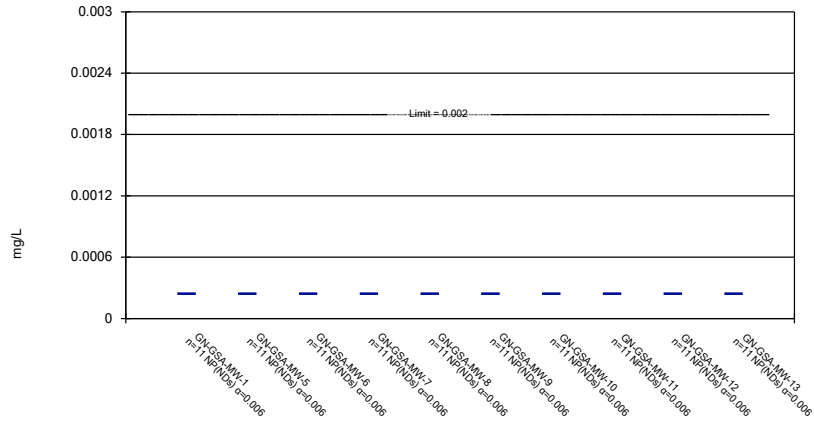
Compliance Limit is not exceeded.



Constituent: Lithium Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

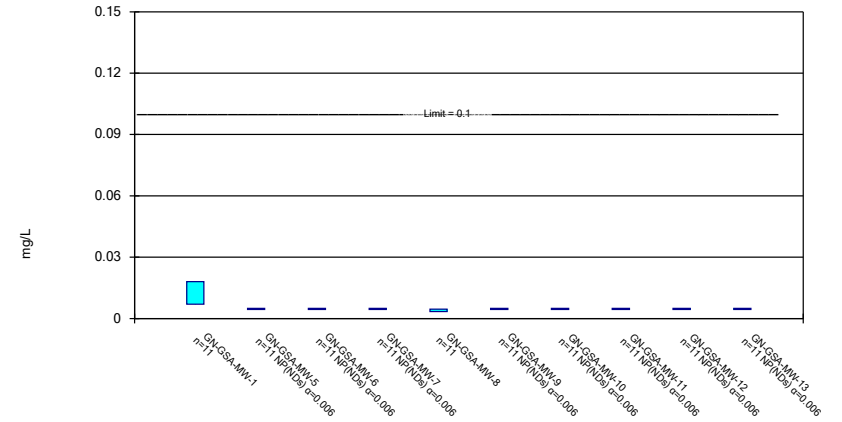
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Parametric and Non-Parametric (NP) Confidence Interval

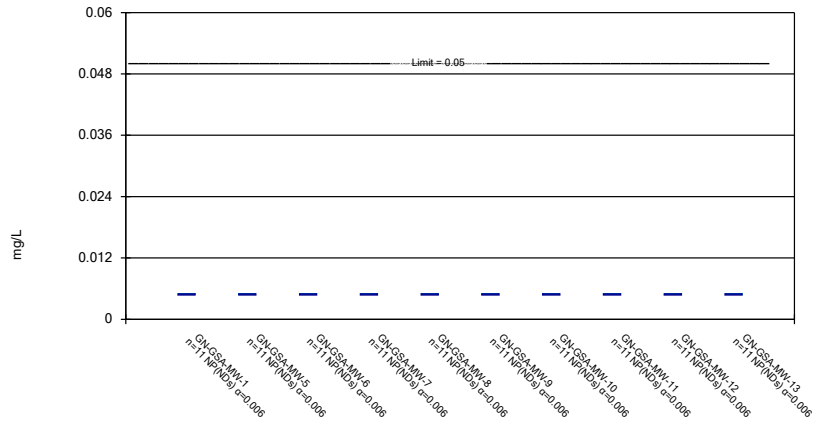
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/31/2019 11:35 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

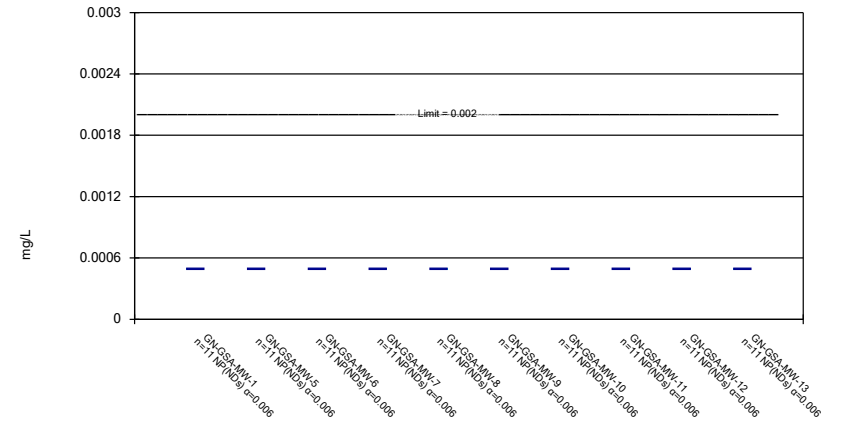
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 1/31/2019 11:36 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/31/2019 11:36 AM View: Confidence Intervals
Plant Gaston Client: Southern Company Data: Gaston GSA